



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**A STUDY ON FACTORS AFFECTING NAVY
OFFICERS' DECISIONS TO PURSUE FUNDED
GRADUATE EDUCATION: A QUALITATIVE
APPROACH**

by

Kimberly M. Fowler

June 2017

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**A STUDY ON FACTORS AFFECTING NAVY OFFICERS' DECISIONS TO
PURSUE FUNDED GRADUATE EDUCATION: A QUALITATIVE APPROACH**

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ABSTRACT

This thesis examines if adjusting the service obligation for officers who pursue advanced-level degrees has the potential to increase returns to investment from Navy-funded graduate education. Using a qualitative approach of focus groups and one-on-one interviews with thirty-five Naval Postgraduate School (NPS) resident students, this thesis aims to identify the primary factors Navy officers consider when deciding to attend fully funded graduate education at NPS, how these factors vary by communities and years of commissioned service, and how the decision to attend NPS might be impacted by a change in service requirements. The depth of answers from the study participants provides valuable feedback about officers' perceptions of value and costs related to Navy-funded graduate education and highlights the differences in these perceptions among officer communities. As a result of the study, it is recommended that the Navy not add more than six months of service obligation, as doing so may have a negative effect on an officer's decision to accept a graduate education opportunity and, as a result, the decision to retain. The findings can be used by policymakers to make more informed decisions on how to fund and obligate service members who choose fully funded graduate education.

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LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|-----------|---|
| AFIT | Air Force Institute of Technology |
| APA | American Psychiatric Association |
| CIVINS | Civilian Institutions |
| CNO | Chief of Naval Operations |
| DL | Distance Learning |
| DOD | Department of Defense |
| DODINST | Department of Defense Instruction |
| DON | Department of the Navy |
| EDO | Engineering Duty Officer |
| EOD | Explosive Ordnance |
| GEP | Graduate Education Program |
| GEV | Graduate Education Voucher |
| HR | Human Resources |
| IP | Information Professional |
| KSA | Knowledge, Skills and Abilities |
| METOC | Meteorology and Oceanography Community |
| MSO | Minimum Service Obligation |
| MSR | Minimum Service Requirement |
| NPC | Navy Personnel Command |
| NPS | Naval Postgraduate School |
| NWC | Naval War College |
| OPNAV | Office of the Chief of Naval Operations |
| OPNAVINST | Office of the Chief of Naval Operations Instruction |
| PRD | Projected rotation date |
| RL | Restricted Line Community |
| ROI | Return on Investment |
| SC | Staff Corps |
| SECDEF | Secretary of Defense |
| SECNAV | Secretary of the Navy |
| SWO | Surface Warfare Officer |

| | |
|------|--------------------------------------|
| TA | Tuition Assistance |
| URL | Unrestricted line community |
| VGEP | Volunteer Graduate Education Program |
| YOS | Years of Service |

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I. INTRODUCTION

A. PURPOSE OF STUDY

This study assesses the potential impact of changing the service obligation of Navy fully funded graduate education for naval officers who pursue advanced-level degrees. This thesis employed a qualitative approach to identify factors that Navy officers use when deciding whether or not to attend fully funded graduate education. Additionally, it investigates how these factors would relate to a change in the service obligation. Using focus groups, one-on-one interviews and a short questionnaire to solicit naval officers' opinions, this study explores factors that might differ across officer categories and communities. After the data were collected, the most relevant factors were identified. These findings can be used by policymakers to make more informed decisions on how to fund and obligate service members who choose fully funded graduate education.

B. THESIS RESEARCH QUESTIONS

The primary research questions are:

1. What factors are most critical to the decision of Navy officers to pursue fully funded graduate education?
2. What is the likely effect of change in the minimum service obligation for Navy fully funded graduate education on the decision to pursue graduate education for different officer categories and communities?

The secondary research questions are:

3. Can the Navy increase its return on Navy fully funded graduate education through a change in the minimum service requirement?
4. What are the trade-offs from an increase in minimum service requirement?

C. SCOPE AND LIMITATIONS OF STUDY

The sample population was limited to current resident NPS students who were Active Duty Navy officers during the 2016-2017 academic year. This study only captures Navy officers who chose to come to NPS and does not include those who chose

not to attend NPS, which is a primary limitation of the thesis. The student researcher and other investigators considered this limitation into consideration when providing recommendations to policymakers who make decisions about Navy's graduate education policy.

D. ORGANIZATION OF THESIS

Chapter II provides a background on what graduate education opportunities are offered within Navy each community from the various types of Navy fully funded and partially funded programs. Chapter III presents a review of selected prior studies that provide insights into the research framework for this thesis. Chapter IV details the research method used in this thesis, presenting the questionnaire and focus group/interview questions. Chapter V presents the analysis of results and discussion based on the questionnaire and focus group/interview answers. It also discusses how the Background and Literature Review sections tie into the Findings and Analysis section of Chapter V. Finally, Chapter VI provides a summary of results and conclusions. Recommendations are provided to policymakers based on an analysis of officer interviews, prior studies, and lessons learned.

II. BACKGROUND: GRADUATE EDUCATION IN THE U.S. NAVY

A. NAVY-FUNDED GRADUATE EDUCATION: A HUMAN CAPITAL INVESTMENT

The Navy has invested in its human capital through Navy-funded graduate education since the 1900s when “the belief that advanced education for U.S. Naval officers would be intrinsically valuable to the Navy” (NPS, 2015). Hence, the Naval Postgraduate School was founded and as a result, the graduate degree opportunities for its officers have only continued to increase from the types of degrees to the location of the graduate programs. As the opportunities for graduate education programs continue to increase, the Navy must continually review its policy to ensure the end result justifies the means of its monetary investment. In 2008, the Department of Defense (DOD) “updated its policy to ensure both partially and fully funded graduate education programs were established for all uniformed military officer personnel” (p. 1). With the establishment of programs for graduate education, the military has proven itself just as competitive with the civilian labor force in offering graduate education for current and future officers. The intent of the graduate education program is “to provide educational opportunities which contribute to the effectiveness of the Military Departments and DOD by fulfilling a present need, anticipated requirement, or future capability” (2008, p. 2). By investing in its human capital, the Navy ensures its officers continue to remain productive and progress throughout their military careers in knowledge as their responsibility increases.

While the Department of Defense (DOD) instruction outlines the graduate education program for all military services, the OPNAV instruction outlines the Navy’s plan to provide its officers graduate education opportunities. The OPNAV instruction discusses how graduate education is “essential to developing adaptable leaders and a strategic investment in the development of Navy warfighters” (DON, 2015, p. 2). It defines funded education as when a member, “participating in a degree or non-degree education program, receives full pay and allowances with some amount of tuition or other schooling costs assumed or paid by the U.S. Government. Education may be in a full-

time, part-time or off-duty status” (DON, 2015, p. 3). NPS is considered a fully funded education program as the officers who are selected to attend are full-time students and continue to receive full pay and allowances throughout their tour.

To help carry out the OPNAV instruction, the Navy created a department, PERS-440 Graduate Education and Training Placement, who is responsible for selecting officers to attend the Navy-sponsored graduate education programs. An officer can only attend one Navy-sponsored graduate education program in his or her career, which is the same for the other services where only one DOD funded graduate degree is permitted per officer. However, if an officer laterally transfers or accesses into a different or new community then he or she is allowed to attend another funded graduate program (DON, 2015, p. 4). “The minimum service obligation for all graduate education programs requires Navy officers to serve on active duty for three years upon completion or disenrollment of the assigned program” (DON, 2015, p. 37). With the clear requirements of the Navy’s instruction for funded-graduate education, this thesis can clearly define the research question, which leads to further refined answers of how changing the service obligation will affect Navy officers’ decisions to attend funded-graduate education programs.

2008 CNA Report

In 2008, the Navy enlisted the CNA corporation to assist in developing a strategy for graduate education for its URL officers. The authors looked at the career-timing of Navy officers who received graduate degrees, what institution they received them from, and whether the officers were resident or non-residents when they received their degrees (Moskowitz, Rodney, & Lawler, 2008, p. 1). In this way, URL communities can determine at what point in an officers’ career is the most beneficial to send them to a graduate program. The Navy’s purpose in sending its officers to get graduate level degrees is to “enhance critical thinking, specifically in technical degrees, which in turn should help the officer develop a specific expertise” (Moskowitz et al., 2008, p. 1). The findings within the report included: officers mostly receive graduate degrees as Lieutenants and Lieutenant Commanders, almost 40 percent earned their degrees from NPS, and more officers receive degrees through resident programs compared to non-

resident programs (Moskowitz et al., 2008, p. 2). These findings are important to consider as a foundation for this thesis to compare the demographics of officers collected in the questionnaires from the focus groups and interviews. Since the report was conducted in 2008, the findings provide a foundation to assess the point where the URL communities were in terms of the ROI for graduate education and to where they currently are with the data collected in 2017 for this thesis. In this way, policymakers compare whether the changes to the graduate education policy are still meeting the Navy's end goal.

Regardless if the Navy's graduate education policy is meeting the end goal, Secretary of Defense Ash Carter has launched an initiative to improve and diversify graduate education for the officer corps across branches (Pellerin, 2016). With this initiative, the Pentagon is pushing for more officers to attend graduate school as well as to attend top civilian schools (Tilghman, 2015). However, the changing of the service obligation for fully funded graduate education in the Navy could jeopardize this plan for wanting more officers to attend graduate school. The findings of the CNA report support this plan for it found "officers with graduate degrees are more likely to promote and tend to stay longer in the Navy than officers without graduate degrees" (Moskowitz et al., 2008, p. 3). However, this thesis strives to find if the concept of increasing the service obligation for Navy-funded graduate education would compromise officers' decisions to take advantage of graduate education opportunities. With the data and analysis conducted on current Navy NPS students, readers will be able to determine for themselves if the changing the service obligation will affect the Navy's ability to not only retain, but recruit, the most talented officers.

B. NAVY GRADUATE EDUCATION POLICY 2015 (OPNAVINST 1520.23C)

Before addressing the impact of service obligation on retention for graduate programs, it is important to understand the Navy's current policy for seeking return on investment for officers' fully funded graduate education. The OPNAV Instruction "provides policy and procedural guidance for the Navy's graduate education program for officers and enlisted personnel" (DON, 2015, p. 1). The instruction discusses how education is crucial for "Navy officers to continue to be innovative, especially when

faced with uncertainty within an environment and specifically how graduate education enables officers to establish an extensive array of knowledge necessary to lead the Fleet” (DON, 2015, p. 2).

Although this guideline broadly defines graduate education for Navy officers, graduate education should align with the requirements of the major area sponsors. As defined in the instruction, “A major area sponsor is a Navy flag officer, within the Navy subspecialty system framework, who is responsible for the requirements and resources of a broad range of curricula group into a particular category, including defining core skill requirements, educational skill requirement, billets and quotas” (DON, 2015, encl. 1). This Navy flag officer is responsible to the Vice Chief of Naval Operations for ensuring the education programs, especially higher level programs, are providing the knowledge, skills and abilities (KSAs) officers will need in follow-on billets as well as throughout their careers. Understanding a Navy Flag Officer’s responsibilities is critical for defining utilization, which helps determine whether the return on investment for officers attending graduate education is measured in utilizing the subspecialty in a billet or throughout their career.

The instruction identifies NPS as the Navy’s primary source of graduate education because its curricula and programs are specifically designed to match education skill requirements with KSAs required by major sponsors (DON, 2015, p. 3). Civilian institutions follow the same guidelines as outlined at the NPS to ensure the graduate programs are meeting the requirements of the major area sponsors. Along with NPS, the instruction lists 27 graduate-level education programs available, which demonstrates the Navy’s promise to provide an array of opportunities for its officers to obtain a higher level degree (DON, 2015, encl. 2). Regardless of the institution, the requirements for officers in terms of graduate education programs should be managed primarily through the Navy Subspecialty System (DON, 2015, p. 3). According to the OPNAV, the “Navy Subspecialty system major area sponsor shall liaise with the Navy Personnel Command (NPC) to ensure student utilization requirements are met” (DON, 2015, p. 15). Therefore, the area sponsor for each curriculum should be working with

NPC to ensure officers who received graduate education are utilizing their subspecialty in follow-on tours.

Despite the requirement that for utilizing the subspecialty officers obtain from graduate education in a follow-on tour, both detailers and officers find it difficult to abide by this obligation in certain communities. In a previous study, former NPS student LCDR Loudior found that certain communities have set career paths where its officers must fill certain billets to promote, which prevents officers from filling subspecialty billets directly after graduation (2012, p. 41). The instruction addresses this shortcoming by directing the active duty and full-time support (FTS) offers to fulfill the subspecialty-coded billet immediately following their milestone tour. (DON, 2015, p. 6). Therefore, this thesis uses OPNAVINST 1520.23C instructions as a foundation to determine factors preventing the increased ROI from the Navy funded-graduate education. The gathering of all of the facts will enable the best question which will in turn provide the correct answer and will ensure stakeholders, the major area sponsors, and their clients, Navy officers, are achieving the same end goal.

Before officers are able to select what graduate program suits them, they have to be educated on what options are available to them in their community and at various points in their careers. According to the OPNAV, “Commanding officers shall ensure officers are advised of the value of Navy-relevant graduate education and recommend high potential officers for full-time resident opportunities as applicable” (DON, 2015, p. 14). At the same time, the instruction also states that only proven performers with high career potential should be selected for funded educational opportunities, such as funded graduate education. Officers with sustained superior performance prior to graduate education will only continue to perform effectively in the Fleet. However, officers who choose a Navy-funded graduate program face a trade-off between an operational billet and graduate education, which also incurs an additional service obligation. “The service obligation for officers commences upon completion of, or withdrawal from, an education program and will be served concurrently with any other service obligation, which for a full-time master’s degree with a program length of greater than twelve months is three years” (DON, 2015, p. 7). By selecting only proven performers with career potential, the

Navy ensures it retains only the Fleet's top talent for follow-on billets but also for training and mentoring of its junior personnel.

C. GRADUATE EDUCATION PROGRAMS AVAILABLE FOR NAVY OFFICERS

Twenty-seven Navy funded graduate-level education programs are available to Navy officers, ranging from full-time to part-time, degrees to non-degrees, fully funded to partially funded, and CONUS civilian institutions to OCONUS international military institutions. A constant found throughout these programs is that each requires an officer to obligate service in exchange for education benefits. The period of obligated service commences at the end of their specified program (DON, 2015, p. 7). According to a CNO message, "Active duty officers participating in Navy-funded graduate education on a full-time, part-time or off-duty basis will incur an active duty obligation of three years after completion of or withdrawal from education" (CNO, 2007). The incurring of an additional obligation represents the trade-off officers also consider when deciding to attend a fully funded graduate program in the Navy.

Two different types of funded graduate education opportunities are available for Navy officers: fully funded and partially funded. According to the 2015 OPNAV instruction, fully funded graduate education is "when the member receives full pay and allowances with majority of the tuition and other schooling costs assumed or paid by the U.S. Government or by another organization" (DON, 2015, encl. 1). Also, the "member is assigned to duty under instruction for primary duty as a student and attends school instead of performing usual military duties" (DON, 2015, encl. 1). "Partially funded graduate education consists of the officer receiving full pay and allowances with the majority of the tuition and other schooling costs paid by the member from personal funds or benefits" (DON, 2015, encl. 1). "The member is assigned to primary duty as a student and attends school instead of performing normal military duties" (DON, 2015, encl. 1). "Any funded education must meet validated or anticipating Navy requirements as outlined by the OPNAV Instruction 1520.23C" (DON, 2015, encl. 1). Although there are many options, each community offers the opportunity for graduate-level programs at different times in officers' career.

If an officer is enrolled in full-time or fully funded education, he or she must “maintain a full course load, which is a minimum of twelve semester hours during regular terms and six semester hours during summer sessions or as defined as full-time by the institution” (DON, 2015, encl. 1). An officer may choose to attend graduate-level programs on a full-time or a part-time basis. The term full-time education is defined as a program where an officer’s primary obligation is to be a student, pursuing a full-time academic load year-round. Part-time education is when “the officer can participate in classes for some minimum amount of time during the work day instead of performing military duties to which the officer is assigned full-time” (DON, 2015, encl. 1). An officer may also choose to participate in classes during an off-duty status and off-duty hours. In both instances, the member receives full pay and allowances. This section outlines the graduate program opportunities for each officer category: Unrestricted Line (URL) community, Restricted Line (RL) community, and Staff Corps (SC).

D. NAVY-FUNDED GRADUATE EDUCATION OPPORTUNITIES BY OFFICER COMMUNITIES

1. Unrestricted Line

This section describes the URL opportunities offered to their officers: Surface Warfare Community, Aviation Warfare Community, Submarine Warfare Community, Naval Special Warfare Community, and Explosive Ordnance Community.

a. Surface Warfare Community

The Surface Warfare Officer (SWO) Community offers a variety of programs for officers to earn a graduate degree in different capacities—from time frames to billets. Within the SWO career path, most officers will receive the chance to earn a graduate degree in their first shore tour at the five-year of service mark. This time allows officers the opportunity to take an “operational pause” from the high tempo of sea tours by selecting certain billets or attending graduate school. The following section describes the assortment of opportunities offered to SWO officers to further their education.

The Naval Postgraduate School (NPS) in Monterey, California, is the primary source of graduate education for naval officers, especially SWO officers. It is a fully

funded graduate level institution where each degree is awarded a subspecialty code (Clark, 2016, p. 10). An added benefit in attending NPS, compared to a civilian institution, is most curriculums integrate Joint Professional Military Education Phase I into the schedules which allows the officers to accomplish both a graduate degree and this professional requirement. As stated in his 2016 thesis, Clark mentions an additional benefit to attending NPS is the exposure to peers and senior officers from other Navy communities as well as services from both the U.S. and international branches (p. 10).

Another option for SWO officers is the Graduate Education Voucher (GEV), which is “a Navy-wide program that awards \$20k a year for a maximum of two years toward an officer’s graduate education” (DON, 2012). “The voucher may be used at any number of educational institutions as long as the program meets the requirements of an approved subspecialty code and is approved by NETC” (DON, 2012). This option allows SWO officers the freedom to choose a graduate education other than NPS. Another option for officers who do not want to earn a graduate level degree with NPS, he or she can opt to do the SWO Instructor Program, also known as the 24/12 program. This program strives to incentivize a junior officer (JO) “to take orders with shore commands such as an Afloat Training Command (ATC), whose mission is to promote training and instruction” (Clark, 2016, p. 12). The SWO Instructor Program is known as the 24/12 program because the first 24 months consist of the officer’s primary responsibility to the command while pursuing graduate education during off-duty hours. Then the following twelve months would consist of light duty support to the command while continuing to pursue “graduate education in a program of their choice using GEV” (Clark, 2016, p. 12). “A JO who selects the 24/12 program must sign Revised Junior Critical Skills Retention Bonus (RJCSRB)” (Clark, 2016, p. 12). SWOs who opt for this program also commit to “serving no fewer than two DH sea tours” (DON, 2012). “For a SWO JO, RJCSRB realistically makes the additional commitment five years as opposed to the three mandated by the Navy” (Clark, 2016, p. 11).

SWO officers also have the opportunity to pursue a fully funded graduate degree through a program called the United States Naval Academy (USNA) LEAD program. It “awards a graduate degree in Leadership, Education, and Development from a university

in the Washington, D.C.-Baltimore metropolitan area” (DON, 2008). The program consists of “the officer exclusively pursuing his or her graduate degree for the first twelve-month period followed by a 24-month period where participants serve as a USNA company officer” (DON, 2008). However, these billets are limited per year, which means the USNA LEAD program is very competitive. Another option for officers to pursue a different type of graduate degree while serving at USNA is through the Graduate Education Plus teaching (GET) program. It is very similar to the LEAD program with the exception of the participant serving as an instructor of various academic subjects at USNA instead of as a company officer. However, the billets allowed for this program is also competitive and limited, which is similar to the LEAD program. Both of these programs carry an additional Navy-mandated service period, as well as a requirement of the officer to sign the RJCSRB. In addition to earning a graduate degree, “participants will be enrolled in JPME Phase I during their 24-month follow-on tour as a company officer or instructor” (DON, 2006).

The Tuition Assistance (TA) program provides “active duty personnel and some reservists on active duty a portion of the tuition costs for course taken in an off-duty status at an accredited college, university, or vocational/technical institution” (NPC, 2016a). Unlike some of the other programs discussed, TA is not a fully funded graduate education program, but can offset some of the monetary costs for earning a graduate level degree. JOs can use TA as a tool to “earn a graduate degree during their shore tour without any billeted assistance allotting time to complete” (Clark, 2016, p. 13). Although using the TA program obligates JOs to an additional two years of service, the additional obligation may be served in conjunction with any other service requirement. However, it “does not confine them to the SWO community as if they had signed RJCSRB” (DON, 2008).

SWO officers also have the option to obtain a Political-Military (POL-MIL) master’s degree through the POL-MIL master’s program. If selected to become part of this highly-competitive program, “a POL-MIL master’s degree gives naval officers the opportunity to not only become members of the POL-MIL subspecialist community, but to also receive an additional qualification designation (AQD) code” (DON, 2011a). An

important benefit to the program is that it allows officers the unique experience and opportunity to work in prestigious university programs across the country. “The Navy needs officers with a POL-MIL specialty background to enable the service to evolve within the global strategic environment” (DON, 2011a). The POL-MIL program consists of the “officer applying to a mix of one and two-year graduate programs at Harvard, Stanford, Tufts, Georgetown, or Johns Hopkins University” (NPC, 2016a).

The Naval War College offers SWO junior officers the opportunity to receive an accredited Master of Arts in National Security and Strategic Studies along with completing JPME Phase I on a very limited basis. The intermediate course of instruction is “designed for officers in the Lieutenant Commander or Commander paygrade but are able to offer the quota to Lieutenants in the event there is an opening” (NPC, 2016a). The Naval War College Intermediate course of instruction allows junior officers to earn a graduate degree in 12 months. The prospect of allowing junior officers to be able to earn a graduate degree and interact in a classroom environment with senior officers demonstrates the SWO community’s promise to enable their officers to pursue higher level education.

The SWO community also offers its officers the opportunity to study at an overseas university for graduate level degree through the Olmsted Scholarship program. The scholarship is funded by the Olmsted Foundation and the obligation is to “serve on active duty for three times the number of months overseas” (Clark, 2016, p. 11). “An additional qualification to apply for this program includes a foreign language aptitude test as the program provides a two-year graduate study program using a foreign language” (DON, 2011b). The Olmsted Scholarship Program is different from the other graduate programs in that the officer’s career must allow for the time allotted for the program. As evident from the list of graduate degree programs, the SWO community is committed to providing its officers an array of opportunities to pursue further education. This thesis strives to analyze the factors that SWO officers consider when deciding to pursue funded graduate education and if a change in the minimum service obligation will affect their decision.

b. Aviation Warfare Community

The Aviation Warfare Community matches the amount of graduate education opportunities for its officers that the Surface Warfare Community offers. Aviation Warfare officers are offered the Naval Postgraduate School and the Graduate Education Voucher (GEV) programs as the main avenues to earn a master's degree. However, the quotas for both programs are limited, whereas the GEV program is available to individuals on their shore tours and who are in the paygrade of 03 and senior (DON, 2013, p. 6). In terms of NPS, there are aviation specific quotas which means it depends on the individual's projected rotation date (PRD) and course enrollment dates (NPC, 2016b).

Both the Aviation and Surface communities share the same cultural bias against taking time away from an operational billet. Therefore, it is better to take billet in the Fleet and earn a master's degree on your time than it is to attend NPS or the Naval War College (NWC) programs which leave the officers with unobserved FITREPs. However, in both communities, a master's degree is highly regarded and necessary for progression in an officer's career in terms of promotion and more senior billets. According to Fodor's 2016 master's thesis, "Students who are in the Navy and in the aviation community tend to be over-represented in DL" (p. 25). This finding recommends that naval aviation officers take an operational billet and enroll in Distance Learning for graduate education to remain competitive in the community.

The main difference between both groups of officers in these communities is the timing of when they are offered the chance of graduate education. Typically, Aviation Warfare officers have to serve their initial obligation of seven years before being offered graduate school during their first shore tour. SWO officers have to wait an average time of about four years before they are offered a chance at earning a master's degree. During the first shore tour which is between the five-year to eight-year mark, Aviators are offered the opportunity to earn a master's degree. Although the community values graduate education for its officers and makes it mandatory to promote to Lieutenant Commander, the community also desires officers to have a diverse shore tour assignment. It is stated in the BUPERS community brief that "due to a compressed career path after

winging, Graduate Education is frequently not possible prior to LCDR for the Aviation community” (BUPERS NPC, 2016b, p. 13). As a result, officers within the Aviation community have the difficult task of choosing the most beneficial graduate program with respect to timing for their career.

c. Submarine Warfare Community

The Submarine Warfare Community offers more opportunities to its officers at civilian institutions to earn a master’s degree than other communities. In addition to NPS, NWC and the other scholarship programs, Submariners are offered the opportunity to attend MIT and Woods Hole Oceanographic Institution, University of Illinois at Chicago online degree in Engineering, Duke Master of Engineering Management, and Massachusetts Institute of Technology (MIT) Seminar XXI. In the Naval nuclear community, it is a goal for officers to achieve a master’s degree before promotion to Commander (O-5) (Cheek, 2013, p. 1). However, Cheek also mentions in her master’s thesis that the community encourages officers to get their master’s degrees before the 12-year mark of service and serving a sea tour as an Executive Officer (2013, p. 1).

Submarine officers have three chances to earn a master’s degree at different paygrades and different points in their career. The first opportunity is as an Ensign (O-1) where the officer may participate in the following three programs: Voluntary Graduate Education Program, Immediate Graduate Education Program, and Civilian-Funded Scholarship (Cheek, 2013, p. 48). The second opportunity is as a Lieutenant (O-3) during their first Junior Officer Shore Tour where an officer may participate in one of the following programs: Burke, Olmsted, LEAD, GEV, Officer Scholarship, and a fully funded scholarship to NPS or a civilian institute (Cheek, 2013, p. 48). The third and final opportunity for a nuclear officer to obtain a master’s degree is as a Lieutenant Commander during their Department Head Shore Tour where the officer may participate in the same programs that was offered as a Lieutenant (Cheek, 2013, p. 49).

Several differences exist within the Naval Nuclear community when sending their officers for graduate education compared to the other communities. First, Submariners are only allowed away from nuclear plants for a certain amount of time to maintain their

certification. They are typically offered a chance at graduate education before attending graduate school or after their initial obligation of both nuclear power school and division officer tours. Second, “there are multiple billets that are required to be filled by a nuclear-qualified officer during their JO and DH shore tours” (Cheek, 2013, p. xv). Lastly, Cheek states that there are three main goals for nuclear officers to complete while attending graduate school which are: earn a master’s degree, Joint Professional Military Education (JPME), and fulfill the requirements of a subspecialty code (2013, p. xv).

d. Naval Special Warfare (NSW) Community

Within the NSW Community, graduate education is expected and encouraged at the first and second development tour for a SEAL Officer which could either be sea or shore based (BUPERS NPC, 2016b, p. 8). The time difference for getting offered graduate education as a SEAL officer could be as early as four years or as late as 12 years in the community. To promote to Lieutenant Commander, the NSW community places a high value on officers having already achieved a master’s degree. Similar to the SWO Community, NPS is offered as the primary source of graduate education for SEAL officers. However, officers also have the opportunity to receive a graduate degree on a shore-based tour on a part-time basis through the use of the GEV program and TA.

e. Explosive Ordnance (EOD) Community

In comparison to the NSW Community, the EOD Community does not place graduate education high on the desired attributes for officers to promote to the next rank (BUPERS NPC, 2016b, p. 10). Within an EOD officer’s career progression, the first opportunity to attend graduate education is at the eight-year mark during their shore tour. The programs offered to the EOD officers are the same as the opportunities offered to the SEAL officers. The main difference in this community in terms of graduate education is when in the officer’s career is the prime time to receive the degree. According to the career progression in the BUPERS NPC community brief, the EOD community focuses on its officers obtaining JPME Phase I and attending NPS around the year eight mark of service (2016b, p. 10).

2. Restricted Line

This section summarizes the graduate program opportunities for the following Restricted Line Communities: Human Resources, Public Affairs Officer, Engineering Duty Officer, Foreign Area Officer, and Information Warfare Community.

a. Human Resources (HR) Community

Within the Human Resources (HR) community, it is highly regarded to obtain a master's degree early on in the officer's career. As O'Sullivan remarks in her 2006 thesis, "earning a master's degree is part of the progression of a Navy HR officer because it is important for promotion and screening for milestone billets" (p. 3). HR officers have the following options to achieve a master's degree: civilian university, naval, or other War college, NPS (OA, FM, IT, MSA) or through the Distant Learning Professional Military Education program (DON, 2005). As the community consists of accessions through lateral transfers and POCR boards, HR officers place a high regard for graduate education as it is a requirement for advancing within the community.

b. Public Affairs Officer (PAO) Community

For the PAO Community, its officers are expected to have communication expertise which is demonstrated through "strategy development, tactical execution, enterprise leadership, and providing astute counsel" (BUPERS NPC, 2016b, p. 24). The completion of graduate education is not highly valued until the officer is up for promotion to the rank of Commander (BUPERS NPC, 2016b, p. 24). The reason for such a late completion and value for graduate education in the community is because the community is made of accessions through lateral transfers and Probationary Officer Continuation and Re-designation (POCR) boards. These accessions occur for officers who have between one to twelve years of naval service (BUPERS NPC, 2016b, p. 24).

c. Engineering Duty Officer (EDO) Community

All Engineering Duty Officers are required to obtain a master's degree in a technical curriculum from the Naval Postgraduate School or Massachusetts Institute of Technology. Similar to the HR community, majority of the EDO officers access into the

community as a junior officer so it is vital and expected for an officer to achieve a master's degree with an engineering focus. At NPS, there are several curriculums for EDOs to include: Mechanical Engineering, Electrical Engineering, Combat Systems Engineering, Systems Engineering, Space Systems Engineering, and Computer Science. The Massachusetts Institute of Technology offers the following curriculums with a focus in engineering: Naval Construction, Engineering, and Nuclear Engineering (BUPERS NPC, 2016b, p. 18). It is necessary to earn a master's degree to achieve the EDO warfare qualification which is where an EDO gets Engineering Duty qualified during a tour. These achievements are all necessary prior to getting promoted to Lieutenant Commander and Commander, respectively.

d. Foreign Area Officer (FAO) Community

The career pipeline of a Foreign Area Officer includes a language study tour at DLI and a full-time graduate tour for a master's degree at NPS. Both schools are necessary and vital for progression in the community. According to BUPERS, "FAO assignments are a balance of in-country and staff tours that develop security assistance, attaché and political-military competencies applied to direct International Engagement with foreign navies, militaries, and governments" (BUPERS NPC, 2016b, p. 26). Within the career path of a FAO, graduate education at NPS and a language at the Defense Language Institute are required for officers to become a qualified FAO and serve in a billet (BUPERS NPC, 2016b, p. 26). Therefore, FAOs do not necessarily have a choice in which graduate program they select as the community requires them to attend both NPS and DLI to progress in the community.

e. Information Warfare (IW) Community

The Information Warfare Community is made up of several officer assignments which includes: Information Professional (IP) officers, Cryptologic Warfare (CW) Officers, Intelligence (INTEL) officers, and Oceanography/Meteorology officers. Graduate education is offered to each respective community within Information Warfare at different times. This section outlines the similarities and differences of graduate education programs offered within each community and how it is valued:

(1) Information Professional (IP)

For the Information Professional Community, it is already part of an officer's career progression to do an 18-month technical or cyber master's program. It is a valuable achievement to be progressing towards a technical master's degree prior to being promoted to Lieutenant Commander and then have already completed a technical master's degree prior to being promoted to Commander (BUPERS NPC, 2016b, p. 33). It is natural for officers in this community to have the opportunity to attend graduate education at the ten-year mark of service and beyond (BUPERS NPC, 2016b, p. 32).

(2) Cryptologic Warfare Officer (CW)

Within the Cryptologic Warfare community, officers are not expected to obtain a master's degree until prior to being promoted to Commander. However, the only opportunities to attend graduate school is between the three to ten-year mark prior to being promoted to Lieutenant Commander. The focus of the community values is based around sustained superior performance in leadership and operational billets. Therefore, the CW community shares the same cultural bias as the SWO and other URL communities where it is looked down upon to take time away from operational billets for any reason including attending graduate school. (BUPERS NPC, 2016b, p. 30).

(3) Intelligence Officer (INTEL)

In the INTEL community, officers are not expected to complete a master's degree until prior to achieving the rank of Commander. The community highly values sustained superior performance in leadership and operational billets. (BUPERS NPC, 2016b, p. 35). During the initial tours, Intelligence officers are expected to earn the "Information Warfare Officer Qualification, achieve superior performance in operational tours, and be in a competitive intelligence tour" (BUPERS NPC, 2016b, p. 35). These community values do not leave room for officers to have time to achieve a master's degree. However, there are opportunities during the first shore tour during the lateral gain process for INTEL officers to attend graduate school (BUPERS NPC, 2016b, p. 34).

(4) Oceanography/METOC Officer

For officers in the Oceanography/METOC community, graduate education is not highly valued or necessary until prior to achieving the paygrade of Commander. The community “values a Master’s degree that is Physics-based in either oceanography or meteorology” (BUPERS NPC, 2016b, p. 29). However, since the METOC community comprises of mostly accessions, NPS is the primary source of graduate education for most of its officers. “On a limited-quota basis, officers may compete for a slot to attend MIT” (BUPERS NPC, 2016b, p. 29).

3. Staff Corps

This section describes the following graduate education opportunities for the following Staff Corps Communities: Nurse Corps, Supply Corps, Medical Service Corps, and Civil Engineer Corps.

a. Nurse Corps Community

According to the Navy Medicine Professional Development Center website, graduate education is one of many requirements necessary for Nurse Corps officers to advance their careers. Officers may obtain a graduate degree through TA program or apply for Full-Time Duty Under Instruction (DUINS) (NMPDC, n.d.-a). DUINS offers the opportunity “to attend school on a full-time basis while receiving all benefits and pay in accordance with officer’s paygrade” (NMPDC, n.d.-a). However, officers must have a “minimum of two years’ commissioned experience to apply for DUINS program” (NMPDC, n.d.-a). Nurse graduate students may attend one of the following three military service schools depending on the graduate degree requested: NPS, Army Baylor, and The Uniformed Services University (NMPDC, n.d.-a). Students not in the degree fields provided by the service schools may attend the public or private university of their choice closest to their current duty station NMPDC, n.d.-a). Potential students will be allowed 24 months to complete a master’s degree, 36 months for a Doctor of Nursing Practice (DNP), and 48 months for a PhD. Additional service obligations for attending

any of the graduate schools are the following: three years for the first year and six months for every six months after (NMPDC, n.d.-a).

b. Supply Corps Community

Within the Supply Corps Community, it is critical to obtain a master's degree prior to promotion to Commander. Similar to other communities, NPS is the main hub for Supply officers to obtain a master's degree through several MBA programs. The following approved curriculums include: Acquisition and Contract Management, Supply Chain Management, Financial Management, Financial Management (Energy), and Information Management (NPC, 2014). Supply officers are also offered the opportunity to apply for the following programs: Olmstead Scholar Program, Navy Tuition Assistance, and NPS Executive MBA (EMBA) program. For curricula not available at NPS, Supply officers have the option of applying for the Civilian Institution (CIVINS) Programs, which provides fully funded and full-time graduate education similar to NPS. However, officers do not have the same resident opportunity to complete JPME Phase I in the CIVINS Program as they do at NPS.

The Supply Community offers additional opportunities for their officers to pursue a graduate education through the BusinessWeek Top 30 MBA Program for 810 and University of Kansas Petroleum Management Program for 811 (NPC, 2014). With the Civilian MBA Program for curriculum 810, officers are enrolled in a full-time MBA program and are awarded the 1301P subspecialty code for Supply Acquisition/Distribution Management. Officers selected for the Petroleum Management Program for the 811 curriculum attend the University of Kansas Graduate School of Business full-time (NPC, 2014). In addition to earning an MBA in petroleum management, they also receive a "1307P subspecialty which gives Supply officers the opportunity to fill billets within the Petroleum community in either the Navy or Defense Logistics Agency" (NPC, 2014).

c. Medical Service Corps (MSC) Community

The Medical Service Corps offers a DUINS program to Officers from all 31 specialties within the corps, which is similar to the program offered to the Nurse Corps

Community. With a wide range of fellowship and master's/doctorate level degree programs, there are two opportunities for full-time programs for both out-service and in-service (NMPDC, n.d.-b). The full-time out-service opportunities are available for fellowships and degree programs at civilian companies and organizations as well as civilian College and University systems throughout the country (NMPDC, n.d.-b). Full-time in-service opportunities for Degree programs are available at the Uniformed Services University in Maryland and at the Naval Post Graduate School in California (NMPDC, n.d.-b). MSC Officers are encouraged to look out for the BUMEDNOTE 1520 which lists all MSC DUINS opportunities for the next Fiscal Year as the funding for each program changes annually.

d. Civil Engineer Corps (CEC) Community

According to the CEC Graduate School Handbook, “CEC officers are selected for assignment to graduate school based on seniority, completion of career milestones, and potential for long-term career service” (NPC PERS-4413, 2014, p. 3). Therefore, officers should expect to be selected for graduate school as a senior Lieutenant or as a Lieutenant Commander. The two main programs for CEC officers to obtain a graduate degree is through the CIVINS program and NPS. In Appendix D of CEC Graduate School Handbook, there is a list from approved curricula offered by the graduate programs, which include: Civil Engineering, Construction option, and NPS Mechanical Engineering- Shore Facilities (NPC PERS-4413, 2014, p. D-1). The handbook also lists the approved graduate schools and curriculums for its officers (NPC PERS-4413, 2014, p. D-1). The CEC community stresses the importance of offering graduate education but while maintain a low cost to the Navy. For example, “a CEC officer has to be stationed in Hawaii in order to attend the University of Hawaii for graduate education to avoid high costs to the Navy” (NPC PERS-4413, 2014, p. D-1). Regardless, the CEC community places a high value on its officers obtaining a graduate degree as part of a career milestone and for long-term career potential.

Table 1. List of Graduate Education Opportunities by Community.
Adapted from BUPERS NPC (2016b).

| Communities | Value/Required for Promotion | Rank to obtain a Master's Degree by | Main Opportunities for Fully Funded Grad Ed |
|--------------------------|--|-------------------------------------|---|
| URL | | | |
| Surface Warfare | Highly-valued for promotion later in career. | Commander (0-5) | NPS, GEV, 24/12 program, USNA LEAD, GET program, TA, POL-MIL, NWC, Olmstead Scholarship |
| Aviation Warfare | Highly-valued for promotion later in career. | Commander (0-5) | NPS, GEV |
| Submarine Warfare | Highly-valued for promotion later in career | Commander (0-5) | MIT Seminar XXI, Woods Hole Oceanographic Institution, University of Illinois at Chicago, Duke Master of Engineering Management |
| Naval Special Warfare | Highly-valued for promotion later in career | Lieutenant Commander (0-4) | NPS, GEV, TA |
| Explosive Ordnance | Not highly-valued for promotion | Not identified | NPS, GEV, TA |
| RL | | | |
| Human Resources | Highly-valued for promotion early in career | Commander (0-5) | CIVINS, NPS, NWC, DL Professional Military Education |
| Public Affairs | Highly-valued for promotion later in career | Commander (0-5) | NPS, CIVINS, TA |
| Engineering Duty Officer | Highly-valued for promotion early in career | Commander (0-5) | NPS, MIT |

Table 1 con't. List of Graduate Education Opportunities by Community.
Adapted from BUPERS NPC (2016b).

| Communities | Value/Required for Promotion | Rank to obtain a Master's Degree by | Main Opportunities for Fully Funded Grad Ed |
|---------------------------------|---|-------------------------------------|---|
| RL | | | |
| Foreign Area Officer | Highly-valued for promotion early in career | Lieutenant Commander (0-4) | NPS |
| Information Warfare | | | |
| <i>Information Professional</i> | Highly-valued for promotion early in career | Commander (0-5) | NPS, CIVINS, TA |
| <i>Cryptologic Warfare</i> | Highly-valued for promotion later in career | Commander (0-5) | NPS, CIVINS, TA |
| <i>INTEL officer</i> | Highly-valued for promotion later in career | Commander (0-5) | NPS, CIVINS, TA |
| <i>Oceanography/METOC</i> | Highly-valued for promotion later in career | Commander (0-5) | NPS, MIT |
| SC | | | |
| Nurse Corps | Highly-valued for promotion early in career | Varies | TA, DUINS program (NPS, Army Baylor, and Uniformed Services University) |
| Supply Corps | Highly-valued for promotion later in career | Commander (0-5) | NPS, Olmstead Scholarship, TA, NPS EMBA, CIVINS |
| Medical Service Corps | Highly-valued for promotion later in career | Varies | DUINS program |
| Civil Engineer Corps | Highly-valued for promotion later in career | Commander (0-5) | NPS, CIVINS |

E. CHAPTER SUMMARY

This chapter presented the Navy instruction regarding Navy funded graduate education, and reviewed all Navy-funded graduate education programs available by officer communities. Table 1 summarizes the different graduate education opportunities by officer community as well as what rank each officer needs to earn a master's degree by. The outline of graduate opportunities by community and the review of Navy's graduate education policy highlight differences and similarities among Navy-related factors that affect each officer's decision to pursue funded graduate education. They also provide a framework for analyzing the participants' responses to the focus group and interview questions.

III. LITERATURE REVIEW

This chapter reviews several studies that are the foundation for the analysis conducted in this thesis. The studies mentioned are: Lieutenant Louidor, USN, 2012 master's thesis, Lieutenant Clark, USN, 2016 master's thesis, and 2010 RAND Study on Graduate Education.

A. PREVIOUS STUDY ON EVALUATION OF GRADUATE EDUCATION POLICY IN THE U.S. NAVY (LOUIDOR 2012 MASTER'S THESIS)

In his 2012 master's thesis, LCDR Duquesne Louidor conducted an evaluation on the Navy's Graduate Education Policy by identifying the stakeholders and clients. He states, "The Navy's primary goal in offering funded graduate education is to support requirements for officers with specific subspecialty skills" (2012, p. v). Throughout the thesis, he continues to refer back to this primary goal to ensure the ends match the means or bottom line for the Navy. The findings his thesis provides a foundation for current research on whether changing the service obligation for Navy-funded graduate education will change the demographic as well as retention of officers across communities. By understanding the Navy's Graduate Education policy and who is affected by it, then researchers for this current thesis can answer the previous question in the most accurate way.

In a 2004 Congressional Budget Office paper, Louidor found that "earning a master's degree significantly increases the rate of promotion and retention in not only the officer ranks but enlisted personnel as well" (2012, p. 3). Therefore, graduate degrees are important to a military career which builds the foundation for the current research on how changing the minimum service obligation for Navy-funded graduate education will affect the officer community and the Navy. In a fully funded program, the Navy "provides full pay and allowances for the duration of the course of study plus all tuition costs" (Louidor, 2012, p. 48). Louidor's study proposes "policy and program changes to better manage and more effectively execute graduate education in the U.S. Navy" (2012, p. 48).

The 2008 DOD directive describes the purpose of graduate education in the military which “must increase an officer’s professional growth and provide DOD with the capability to meet both current and future capabilities” (Loudor, 2012, p. 7). Therefore, it would make sense for policymakers to measure the ROI for Navy-funded graduate education by each officer’s growth in his or her career instead of perhaps their contribution to their specific workplace. Currently, “officers who complete certain formal education or training, conduct a permanent change of station or accept a certain promotion will incur an Active duty service obligation” (Loudor, 2012, p. 12).

With respect to the current thesis, we made the assumption that any change to the service obligation for attending Navy-funded graduate education would impact an officer’s decision one way or another. If the changing of the service obligation results in fewer officers choosing to attend graduate education, then the Navy would need to be more stringent in ensuring they receive the ROI from the select officers who do commit to attending funded graduate education. However, Loudor states in his thesis that “it is difficult for the Navy to enforce the payback tour because officers need to work in career milestone tours that are associated with certain communities” (2012, p. 41). He brings up an important factor that the Navy and its policymakers need to consider in deciding to change the service obligation for graduate education as our service is already having difficulty achieving the ROI due to community career milestone obligations without deterring officers from the graduate programs themselves.

Every naval officer makes trade-offs when deciding whether or not to attend full-time graduate education as well; there are trade-offs for big Navy and its policymakers in deciding whether to change the service obligation in examining graduate education ROI. Mankiw defines “trade-offs as opportunity cost or the choice to give up one item to obtain another” (Loudor, 2012, p. 57). In this thesis, the researchers have collected opinions from current Active Duty Navy officers who are NPS students so policymakers can determine for themselves if increase the service obligation for Navy-funded graduate education such as NPS would affect the retention of officers to attend as well as other factors pertaining to general retention in the Navy. In his analysis, Loudor found that the “Navy’s opportunity cost is significantly less under partially funded programs because

officers participating in a partially funded program continue to perform in operational billets and incur a similar service obligation as do their counterparts in a fully funded program” (2012, p. 67). However, Loudor does not mention that some communities require their officers to obtain a graduate degree on a full-time basis. In the case of most RL officers, they would not have the option to choose a partially funded graduate program. Loudor’s findings and recommendations make valid points, which are important to consider when determining whether or not changing the service obligation for Navy-funded graduate education will affect an officers’ decision to attend graduate schools such as NPS.

B. PREVIOUS STUDY ON MINIMUM SERVICE OBLIGATION (CLARK 2016 MASTER’S THESIS)

In his 2016 master’s thesis, LT Eric S. Clark, USN, examined how the timing of Navy-funded graduate education for SWO officers affected retention within the community. He analyzed longitudinal data on SWO officers commissioned between fiscal years 1999–2003 and found SWO DH who earned a “master’s degree at any point within their careers are more likely to be retained within the community” (Clark, 2016, p. 25). Clark does not show that graduate education causes SWO officers to retain within the community at a higher rate. He shows officers who are likely to attend graduate education as also more likely to retain. Graduate education shows the “potential of a strategic investment in human capital that is partially used by the Navy as a retention tool” (Clark, 2016, p. 25). Therefore, it is important for policymakers to understand the implications, which accompany the changing of the service obligation for fully funded graduate education. As the nation’s current unemployment rate is 4.7 percent as of December 2016, both incoming and current naval officers have many employment options besides joining the military, especially the U.S. Navy (U.S. Department of Labor, 2017, p. 1). This thesis addresses what factors are important to officers when deciding to attend fully funded graduate education. Policymakers should consider these factors when deciding whether or not to change the service obligation in an effort to ensure the policy is not only benefitting the Navy and its officers, but also meeting the Navy’s objectives of the program.

C. PREVIOUS STUDY ON EVALUATION OF NAVY GRADUATE EDUCATION POLICY (2010 RAND STUDY)

In 2010, Kamarck, Thie, Adelson, and Krull evaluated the Navy's funded graduate education program with an emphasis on the return on investment to the Navy from funded graduate education. The study strived to identify exactly how the Navy benefited from graduate education. The authors utilized the following model of "opportunities to gain knowledge and skills in a graduate school and apply them to various assignments at sea and ashore" for evaluating the benefits from funded graduate education program includes (Kamarck, Thie, Adelson, & Krull, 2010, p. 1). As the "Navy funds graduate education with the expectation that officers will go on to apply the knowledge and skills in future billets, the authors found the skills gained from graduate education have benefits beyond the utilization in subspecialty billets" (Kamarck et al., 2010, p. 59). Therefore, it is difficult to measure just how productive an officer is in his or her job after earning a graduate level degree. With the 2010 RAND findings on the Navy's Graduate Education program, this thesis recommends policymakers reevaluate the metrics used in determining the return on investment for Navy-funded graduate education as it applies to not only the officers but also their communities.

In addition to finding how graduate education benefits the Navy, Kamarck and associates examined how the differences within officer communities affects the utilization and ROI of graduate education. The RAND study found that "differences exist among Navy communities in the management of officers and billets that require graduate education, particularly between the Restricted Line and Unrestricted Line communities" (Kamarck et al., 2010, p. 60). An example of this difference is that the RL community has comparably more billet requirements where officers often use and reuse their subspecialty skills more so than the Unrestricted Line community (Kamarck et al., 2010, p. 61). Therefore, it makes sense that cultural influences and career demands within the Unrestricted Line community often hinder demand for graduate school. Overall, the authors found that increasing the ROI for graduate education to the Navy starts with the communities shifting away from the negative perception of attending graduate school in place of an operational billet (Kamarck et al., 2010, p. 63). This thesis uses the findings

of the 2010 RAND study to prove and disprove the notion of cultural influences within each professional officer community and whether or not it affected the decision of current Navy NPS students to attend the fully funded graduate school.

D. CHAPTER SUMMARY

The previous studies on Navy-funded graduate education and the current Navy Graduate Education policy reviewed in this chapter provide the foundation for formulating the questions for the participants' questionnaire and discussion during focus groups and interviews, as they will be presented in Chapter IV.

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IV. RESEARCH METHODS

In order to assess the potential impact of increasing the service obligation of Navy fully funded graduate education on the officers' likelihood of pursuing advanced-level degrees, this thesis employed a qualitative approach to identify factors that Navy officers use when deciding whether or not to attend fully funded graduate education. In addition, the thesis investigates how these factors vary across communities, years of commissioned service, and how they might affect the decision to pursue advanced education with a change in the service obligation. This section provides a detailed presentation of the methodology utilized in this thesis. It describes the following: research design, research participants, development of focus group/interview protocol, design and testing of questionnaire and discussion questions, formulation of focus groups/interviews, and how the collected data was transcribed and analyzed.

A. RESEARCH DESIGN

This thesis predominantly uses a qualitative approach. Qualitative data is useful for gathering rich information from individuals to better understand how they are thinking about a particular issue. It is especially helpful in identifying the range of opinions from participants to guide the design of a follow-up large-scale quantitative survey study. Table 2 is adapted from Minichiello's 1990 table, which outlines the difference between qualitative and quantitative research methods.

Table 2. Minichiello's Table of Difference between Qualitative and Quantitative Research Methods. Source: McLeod (2008).

| | Qualitative | Quantitative |
|---|---|--|
| Conceptual | <p>Concerned with understanding human behaviour from the informant's perspective</p> <p>Assumes a dynamic and negotiated reality</p> | <p>Concerned with discovering facts about social phenomena</p> <p>Assumes a fixed and measurable reality</p> |
| Methodological | <p>Data are collected through participant observation and interviews</p> <p>Data are analysed by themes from descriptions by informants</p> <p>Data are reported in the language of the informant</p> | <p>Data are collected through measuring things</p> <p>Data are analysed through numerical comparisons and statistical inferences</p> <p>Data are reported through statistical analyses</p> |
| Source: Adapted from Minichiello <i>et al.</i> (1990, p. 5) | | |

As both quantitative and qualitative data provide valuable information, this thesis focuses on the qualitative data methods because it provides richness and depth within responses that could not be captured with quantitative data. While the primary method was qualitative, the research employs a short questionnaire to gather background demographic and professional data on participants, as well as opinions about possible lengths of service obligations.

This thesis utilizes the research design from O'Sullivan's 2006 master's thesis. In her study, O'Sullivan cites two basic techniques for evaluation: quantitative and qualitative instruments. "Quantitative instruments include: performance records and tests; standardized questionnaires and survey instruments; and personnel assessment instruments" (O'Sullivan, 2006, p. 27). "Qualitative instruments include: interviews, observations, focus groups and case students" (O'Sullivan, 2006, p. 27). For this thesis, qualitative instruments were used to effectively capture the decision making of resident NPS students who were Active Duty Navy Officers. This qualitative approach included the participant voluntarily taking part in a focus group or one-on-one interview with the

researcher answering prompted questions and filling out a questionnaire about factors that were important in deciding to attend Navy-funded graduate education.

Several aspects of the 2006 master's thesis were used for the research design in this current study on Navy-funded graduate education. O'Sullivan's techniques are used as a foundation in this current thesis to decide what types of questions to input in the questionnaires to gain the most honest feedback about Navy-funded graduate education and NPS. Although there were some aspects of the 2006 thesis, such as the goal of a continuous feedback loop, which are specific to the community O'Sullivan was surveying, the analysis and development of survey methods were instrumental in the formulation of questions in both the discussion and questionnaire portion of the data collecting of the current research.

B. PARTICIPANTS

The sample population of participants was limited to naval officers currently enrolled as resident NPS students from a variety of officer communities, demographics, and curricula. The NPS students have already gone through the decision process of whether or not to attend funded graduate education. By surveying the factors, they considered while making that decision, the responses can provide insights into the likely reactions to a change in service obligation. This section describes the number of participants recruited, how participants were recruited, and how IRB approval was obtained.

1. Number of Participants

The researcher planned to facilitate between 8–15 focus groups with officers from a mix of URL, RL and Staff communities. Each focus group was supposed to include between 4–8 participants who would complete a short questionnaire at the beginning of the session and then respond to a series of verbal questions. However, due to time constraints and scheduling conflicts among participants, the researcher was only able to conduct two focus groups, totaling nine participants. To increase the number of participants and ease scheduling constraints, the researcher decided to conduct one-on-one interviews to supplement the focus groups. The interviews were advantageous for the

purposes of this thesis because the researcher was able to facilitate honest feedback from participants on the reason for attending NPS without influence from other students. In the end, 26 interviews were conducted and 9 students participated in the focus groups for a total of 35 study participants. A summary of the represented communities is provided in Table 3.

Table 3. Participant Designator by Officer Category

| Officer Category | Community | Designator | No. of Participants |
|------------------|--------------|------------|---------------------|
| URL | SWO | 1110 | 7 |
| | Aviation | 1310 | 2 |
| RL | HR | 1200 | 10 |
| | HR (FTS) | 1207 | 4 |
| | EDO | 1460 | 3 |
| | FAO | 1710 | 1 |
| | METOC | 1800 | 1 |
| | IWO | 1810 | 1 |
| | IP | 1820 | 2 |
| Staff Corps | Nurse Corps | 2900 | 1 |
| | Supply Corps | 3100 | 3 |
| Total | | | 35 |

2. Recruitment of Participants

Naval officers recruited were enrolled as resident NPS students for the academic year 2016-2017. An announcement was distributed on the Student Muster page and a bulk email facilitated through an administrative support staff from the Deputy Dean of Students' Office. The muster page announcement and bulk email recruitment message are shown in Appendix A and B, respectively, for reference. There were two rounds of recruitment conducted from December 2016 to January 2017 with the student researcher sending out an initial announcement through the student muster page and via email with a follow-up two weeks afterwards. With the exception of contacting the student researcher through NPS email, the participation of the respondents was voluntary and anonymous throughout the study.

3. IRB Approval

This research involved the use of human subjects, therefore, approval was obtained from the NPS Institutional Review Board (IRB) as well as from the NPS President in order to recruit and collect information from participants. This thesis received IRB approval on November 30, 2016. The approved initial review protocol number is NPS.2017.0006-IR-EP6&7-A.

C. DEVELOPMENT OF QUESTIONNAIRE AND FOCUS GROUP/INTERVIEW PROTOCOL

This section describes: how the survey instrument and discussion questions were formulated; protocol analysis of survey instrument; and the pilot testing of the survey instrument and questions prior to distribution to research participants.

1. Formulation of Questionnaire and Focus Group/Interview Protocol

Prior to conducting actual focus groups and interviews, the researcher sought exploratory conversations with six NPS students who were Active Duty Navy officers and part of the Manpower Systems Analysis (MSA) curriculum. The officers were from the following communities: Aviation Warfare, Surface Warfare, Human Resources, and Nurse Corps. These informal, exploratory conversations assisted in the development and testing of the questions for the survey and focus groups/interviews used in this study.

2. Protocol Analysis

Once the draft questionnaire and discussions questions were developed, the researcher conducted a protocol analysis to test them. The protocol analysis was conducted using interviews with six current resident NPS students who were Active Duty Navy officers from the MSA curriculum. As the students completed the draft questionnaire, the researcher observed them to detect any misunderstandings. A misunderstanding of the question was detected if the participant asked a follow-on question or hesitated to answer after the researcher read the initial question aloud.

After the protocol analysis, the researcher used the feedback to revise the initial questions for the discussion and questionnaire for the first focus group. In addition, there

were minor edits to the questions for both the discussion and questionnaire after the first focus group. The final product, after the protocol analysis and first focus group edits, is the revised “Focus group/interview Questionnaire for NPS student participant Questionnaire” and “The Effects of MSR Focus Group/Interview Protocol Sheet” in Appendix C and D, respectively.

D. QUESTIONNAIRE

The questionnaire was designed to collect demographic and professional background characteristics, the motivation for attending graduate education, and opinions about increasing service obligation. The questionnaire was administered at the beginning of each focus group and one-on-one interview. It took participants between five to ten minutes to complete it. For reference, the questionnaire is located in Appendix C of this thesis. The questionnaire also allowed the participants to formulate their thoughts before the oral discussion began.

1. Questionnaire Background Questions

The participants were asked a set of demographic and professional background questions: gender, age, marital status, number of dependent children, undergraduate major, graduate degree (if applicable), years of service since commissioning, commissioning source, designator, and when did they plan to retire from the Navy. These characteristics were found significant in studies on funded graduate education utilization (Daggett, 2016, p. 33) and in O’Sullivan’s 2006 master’s thesis. Daggett’s master’s thesis on utilization rates provided a current baseline of Navy’s return on investment for funded-graduate education, which also gave the researchers for this thesis a starting point on which characteristics to look at while gathering data in focus groups or interviews and questionnaires.

2. Motivation to Attend NPS (Ranking Factors)

In addition to the demographic and professional background questions, the participants were asked in the questionnaire to rank the factors that contributed to their decision to attend NPS and briefly discuss their reasons for ranking the factor the way

they did. In an effort to classify the factors across participants, the researcher provided categories of factors for the participant to choose from.

3. Hindsight of Increasing Service Obligation (Likert Scale)

The last portion of the questionnaire that participants filled out was the Likelihood or Likert scale. This section asked the participants to state the likelihood they would have made the same decision to attend NPS if the service obligation were increased from its current length by increments of six months, from six months to 24 months.

E. FOCUS GROUPS/INTERVIEWS

The objective of the focus groups was to facilitate a group discussion among NPS resident students from different Navy communities about factors most important to them when deciding to attend Navy fully funded graduate education. All interviewees were asked the same questions during the interview or focus groups. The only difference between the interviews and focus groups was the loss of dynamic in a group discussion in the case of the interviews. To ensure consistency across each participant's response, the researcher used a protocol sheet to ensure the discussion went into further depth than what was answered within the questionnaire. The protocol sheet used during the focus groups and interviews to facilitate discussion among participants is located in Appendix D for reference.

1. Scope of Focus Group and Interviews

The focus groups and interviews took between 30 to 60 minutes to complete, which allowed time for the facilitators to annotate answers and for participants to discuss the important factors considered when faced with the decision to pursue Navy-funded graduate education.

There were several procedures used throughout the study, which enabled participants' responses and identities to remain anonymous to streamline the interpretation of information collected. First, each participant was given an alias to ensure their responses were anonymous during the discussion and questionnaire portions of the research. Each alias was from the NATO phonetic alphabet, (i.e., Bravo) and then

later changed to codes, from P1701 to P1735 to simplify the collection of data. Although respondents met with the researcher in person for either a focus group or one-on-one interview, participants were notified of the participation risks through the consent form and were reminded to respect each other's privacy by not discussing or disclosing who or what took place during focus group discussions. Second, a period symbol was substituted into the participants' responses if the participant did not answer the question in the questionnaire.

2. Discussion Question Categories

This section describes the three categories of questions posed to participants during the discussion portion of the focus group or one-on-on interview as well as explains the reasoning for these groupings of questions. The following are the three sections within the protocol sheet: Warm up questions about NPS, Navy fully funded Graduate Education, and Opportunities and Challenges.

a. Warm-Up Questions (NPS)

The purpose of this section was for participants to expand their answers on the survey instrument regarding the factors that led them to decide to attend NPS. First, by asking each participant to elaborate on his or her top factor in attending NPS, the researcher was able to ensure that what the participant answered on the questionnaire matched their actual answer in the discussion. Next, the question about attractive characteristics about NPS is meant to inform policymakers about what features officers currently look for when choosing between graduate programs. Lastly, the question about whether or not spouses or dependents played a role in participants' decision to attend NPS further narrows down what factors officers currently take into consideration when deciding to pursue fully funded graduate education. Policymakers should take these characteristics into consideration when changing policy on graduate education funded by the Navy. The following is a list of questions asked in this section:

- Explain your top factor for attending NPS
- What characteristics about NPS attracted you to choose it for furthering your education?

- What role did your spouse and/or dependents play in your decision to attend NPS?

b. Navy Fully Funded Graduate Education

This group of questions was designed to obtain participants' feedback on a variety of aspects about graduate education funded by the Navy. First, participants were asked whether they believed graduate education at this point in their career is enhancing their career. Participant officers from different communities are offered graduate education opportunities at different points within their career. This question was designed to seek feedback on the timing of graduate education, allowing the researcher to compare the opinions across officer communities and designators. Next, participants were asked whether they believed the NPS degree they are getting would benefit them after they separate from the Navy. By accounting for NPS curriculum and officer designator, the researcher strived to get students' criticism on whether post-Navy career plans were taken into account when deciding to attend graduate education.

The next question elicited the factors participants believed were important to consider when deciding to attend graduate school in the Navy. With this question, the researcher was able to get additional information on the factors significant to the respondent aside from what was documented on the questionnaire, as well as what these officers would tell their subordinates about their experience with graduate education in the Navy. Finally, the last two questions addressed the factors that would or would not cause participants to attend NPS based on an extended service obligation. The Likert scale questions addressed the various increases to the service obligation to provide feedback to the policymakers on how current students and Navy officers would react to additional service obligation in exchange for education benefits. The following is a list of questions posed to participants in this section about graduate education:

- Do you believe graduate education at this point in your military service is career enhancing? Why or Why not?
- Do you believe the NPS graduate degree will help or benefit you in your career post Navy?

- If you were mentoring a junior officer, what factors would you tell them to consider are the most important when deciding to attend graduate school in the Navy?
- With reference to the Likelihood/Likert scale, what factors would cause you not to attend NPS based on an extended payback?
- With reference to the Likelihood/Likert scale, what factors would cause you to attend NPS based on an extended payback?

c. Opportunities and Challenges

The purpose of these last questions was to provide answers about increasing the return on investment (ROI) of funded graduate education in the Navy. The first question asked participants for their opinion on what problems they believe the Navy would encounter by increasing the service obligation for graduate programs, such as NPS. This question closes the gap between the stakeholder, the policymakers and sponsors, and those affected by their decisions, the Navy officers, therefore all opinions are taken in to consideration. Next, the question about what challenges the Navy might face by increasing the service obligation by an additional year or two addresses current students' opinion about obligating additional service and how they think it will affect enrollment in funded graduate education programs. The final question about how participants view the ROI problem puts officers in policymakers' position and encourages them to identify and formulate solutions to the problem of increasing the ROI on funded graduate education. This section allowed officers to take ownership of the problem and put their answers as well as their opinions into perspective. The following is a list of questions that participants were asked to address in this section about opportunities and challenges:

- What types of problems or challenges might the Navy encounter if they try to increase the ROI by increasing the service obligation?
- What challenges might the Navy face in implementing an additional year or two years to the minimum service obligation for fully funded graduate education?
- If you were part of the Navy Education Policy department, what would you do to solve the problem of ROI on Navy-funded graduate education?

3. Data Analysis

This section describes how the data collected from participants during the focus groups and interviews was transcribed and analyzed. It is based on the transcription of the focus groups and interview discussions and the coding of participants' responses.

a. Transcription of Focus Groups/Interviews

To ensure the researcher collected the entirety of each respondent's answers during the focus groups and interviews, each session was digitally recorded and then transcribed. In accordance with IRB protocol, the digital recording was destroyed after the transcription was completed. The digital recording enabled the researcher to focus on each participant's demeanor as he or she answered the questions, which helped facilitate a more meaningful discussion. The focus groups and interviews yielded 220 pages of verbatim transcripts that were used for thematic analysis.

b. Coding of Participants' Responses

In addition to the recording, participants were asked to write their answers to the questions on the questionnaire. This questionnaire was another source used to analyze the demographics and professional background of each officer to determine if there were any trends in answers by: community, gender, or years of service. First, the researcher identified common themes from the responses and then color-coded each theme for easy identification within the spreadsheet. For example, one of the questions asked the participant to list his or her top factor for attending NPS. The following are the themes collected: part of career progression, fully funded graduate education/master's degree, and other. These themes were further divided by officer community, gender, and years of service, which provided a good source of information about the participants. The researcher divided the themes by the following colors: yellow for career progression, blue for master's degree/graduate education, and gray for other themes.

Along with the demographics, the researcher coded the participants' answers to the discussion questions by the three categories (community, gender, or years of service) to categorize responses and further analyze the information. The coding allowed the

researcher to compare responses by demographic characteristics, officer designators, years of service, gender, and other characteristics considered pertinent in prior studies. For example, the researcher color-coded the officer designators into the following categories: red for URL, green for RL, and orange for SC. Finally, the coding of participants' responses enabled the researcher to pull themes with each grouping of answers based on each question, which provided policymakers with concise feedback applicable to their decision process.

F. CHAPTER SUMMARY

This chapter presented the methodology regarding: research design, research participants, development of focus group and interview protocol, designing and testing of questionnaire and discussion questions, formulation of focus groups and interviews, as well as how the data was collected, transcribed, and analyzed. A qualitative approach was necessary to collect in-depth responses from current Navy officers on issues related to the decisions of attending Navy funded graduate education. As shown in the next chapter, this data can inform policymakers on potential outcomes from changing the service obligation for fully funded graduate education and can provide decisions support for increasing the ROI for funded graduate programs.

V. DATA AND RESULTS

This chapter presents the demographics and professional characteristics of the sample of NPS resident students who were part of this study. It also presents the other data collected through the questionnaire: the ranking of the factors related to NPS attendance decision, and the likelihood of attending NPS other longer service obligation (see Appendix C). It then presents and discusses the results from the focus groups and interviews, by community, gender, and years of service.

A. DEMOGRAPHIC AND PROFESSIONAL BACKGROUND CHARACTERISTICS OF PARTICIPANTS

In total, 35 participants from 11 communities participated in this study. This section describes the study's 35 participants' demographics and professional background characteristics: gender, marital status, dependents, undergraduate degrees, graduate degree, and retirement plans from the Navy. Table 4 provides a summary of the demographic and professional background data by officer community.

Table 4. Summary of Participant Demographics and Professional Background

| Characteristic | Full Sample Means (N=35) | URL Sample Means (n1= 9) | RL Sample Means (n2= 22) | Staff Sample Means (n3= 4) |
|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------|
| Male | 18 | 5 | 11 | 2 |
| Female | 17 | 4 | 11 | 2 |
| Married | 19 | 4 | 14 | 1 |
| Number of Dependent Children | 14 | 2 | 11 | 1 |
| Previous Graduate Degree | 5 | 1 | 2 | 2 |
| Commissioning Source: | | | | |
| • USNA | 13 | 5 | 8 | 0 |
| • ROTC | 10 | 1 | 8 | 1 |
| • OCS | 8 | 3 | 3 | 2 |
| • Direct | 2 | 0 | 2 | 0 |
| • STA-21 | 2 | 0 | 1 | 1 |
| Years of Service: | | | | |
| • 0-4 | 2 | 0 | 2 | 0 |
| • 5-9 | 24 | 9 | 15 | 0 |
| • 10-14 | 9 | 0 | 5 | 4 |
| Plan to Retire from Navy in: | | | | |
| • 1-3 | 0 | 0 | 0 | 0 |
| • 4-10 | 15 | 4 | 7 | 4 |
| • +10 years | 20 | 5 | 15 | 0 |
| Under a different service requirement | 13 | 8 | 4 | 1 |

As shown in Table 4, the ratio of male and female participants was similar within each officer category. The RL community had the largest representation of both male and females, 61 percent and 65 percent of each full sample mean, respectively. In terms of married participants, the RL group had the leading percentage of married participants, at 74 percent (14 participants), compared to the URL and SC categories, at 21 and five percent, respectively. Participants from the RL community represented the largest group with dependent children at 79 percent from the full sample. In terms of previous graduate

degrees, the RL and SC communities equally represented the largest percentage at 40 percent from the full sample mean.

At 37 percent across all categories, USNA represented the largest percentage of commissioning source from the overall sample mean of 35. In terms of the leading commissioning sources by each officer category individual sample means, the results were the following: 56 percent of URL participants were commissioned from USNA, 36 percent of URL participants were commissioned from both USNA and ROTC, and 50 percent of SC participants were commissioned from OCS. With regards to years of service, the RL community had the youngest participants, with most officers in their 0–4 years of commissioned service in the Navy, which corresponds with the communities' early timeline for sending officers to graduate school. All of the participants with the most years of service (i.e., 10–14 years of service) were in the RL and SC communities.

In terms of how many participants are currently under a different service requirement obligation, 62 percent of them are from the URL communities. The URL officers are at the point in their career, which corresponds with their communities' timeline for sending officers to fully-funded graduate programs.

Over half of the respondents in this study were married. Therefore, the researcher decided that it was a characteristic worth exploring in further detail, through the focus group and interview discussions, whether marital and dependents status affected officers' decision to attend funded graduate education at NPS.

The data also indicates that over 70 percent of the participants have chosen to retire from the Navy. In terms of gender, 46 percent of the participants who have chosen to retire from the Navy were females. Sixty-seven percent of the participants were from the RL community. However, 100 percent of the SC community participants plan to retire from the Navy. With regard to years of service, the following are the results: eight percent have between 0–4 YOS, 54 percent of participants have 5–9 YOS, and 38 percent have over ten years of service who plan to retire from the Navy. Therefore, the years of service is an important characteristic to consider for the Navy and its policymakers when deciding to extend the service obligation for funded graduate education. For purposes of

this research, the assumed year marker to retire from the Navy is 20 years. The research shows that majority of the respondents could be categorized as career decision-makers. In summary, the background characteristics of participants in this study illustrate that they were career decision-makers based on their desire to retire from the Navy. Marital status or dependents status are not strong drivers in decision making regarding attendance of funded graduate education. Retirement plans of participants indicate that the ability to retire plays an important role in officers' decision to attend fully-funded graduate programs.

This study purposefully sought to gain in-depth qualitative explanations from a smaller group of participants rather than a large-scale quantitative approach. This qualitative approach is meant to play the role of pilot-study and to inform the design of the appropriate questions for a further survey of a larger group of officers.

B. RESULTS FROM SURVEY QUESTIONS, FOCUS GROUPS, AND INTERVIEW DISCUSSIONS

The questionnaire asked participant demographic and professional background information. It also contained two questions that led to more in-depth probing discussions during the focus groups and interviews: (1) motivation to attend NPS (Ranking Factors), and (2) hindsight of increasing service obligation (Likert Scale). The short survey, focus group and interview protocols can be found in Appendices C and D.

Below, the main findings are presented from the survey questions. The focus groups and interview discussions are presented, by community, gender, and years of service.

1. Results by Community

This section provides the results and discussion from the focus groups and interviews by participants' community: URL, RL, and Staff Corps. The community is important to take into account because each community offers graduate programs to their officers at different stages throughout their careers depending on their different training timelines. Therefore, we predict that officers from the RL and SC communities will be less likely to care about the extended obligation because those communities require

officers to attend NPS for career advancement and/or promotion. With regards to officer community, the researchers hypothesized similarities in responses among the same officer communities and designators.

The URL category includes the following officer communities: Surface Warfare, Aviation (includes pilots and naval flight officers), Submarine Warfare, Naval Special Warfare, and Explosive Ordnance. The RL category comprises of the following professional designators: Human Resources, Public Affairs Officer, Engineering Duty Officer, Foreign Area Officer, and Information Warfare which comprises of Information Professional, Cryptologic Warfare, Intelligence Officers, and Oceanography/METOC officers. Finally, the Staff Corps includes the following communities: Nurse Corps, Medical Service Corps, Supply Corps, and Civil Engineer Corps. Within the data, the majority of the officer participants were from the RL community and represented about 63 percent of the respondents. The URL community made up about 26 percent of the participant sample, which comprised the second largest representation of officers. Finally, the Staff Corps made up the least amount of officer participants at about 11 percent of the sample. See Table 3 for communities who participated in this study.

The following sections describes the results for each officer community regarding their motivation to attend NPS, the likelihood to attend NPS if service obligation is extended, and suggestions for increasing ROI for NPS full-time, fully-funded graduate education.

a. Motivation Factors to Attend NPS

In the questionnaire, participants were asked to rank five reasons for attending NPS: promotion, quality of life, benefit to post-Navy career, and Navy-funded education. Table 5 outlines the comparison of results for motivation factors by officer category. Figure 1 illustrates the top ranking factors by officer category.

Table 5. Comparison of Results for Motivation Factors by Officer Category

| Factors | URL | RL | Staff Corps |
|----------------------------|------------|-----------|--------------------|
| Navy-funded Education | 56% | 18% | 25% |
| Promotion/Career Milestone | 22% | 77% | 50% |
| Quality of Life | 11% | 0% | 0% |
| Benefit Post Navy Career | 0% | 0% | 25% |
| Other | 11% | 5% | 0% |

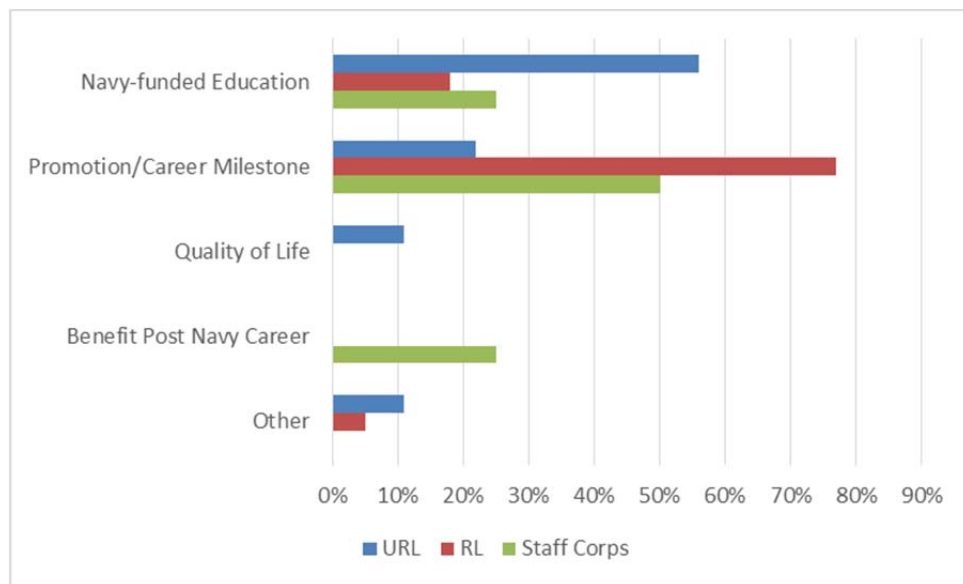


Figure 1. Top-Ranking Factor Results by Officer Category

Within the URL category, over 56 percent of the participants selected Navy-funded education as their top factor for deciding to attend NPS. In comparison, 77 percent of the RL participants chose promotion/career milestone as their top factor for choosing to attend NPS. Lastly, half of the Staff Corps participants selected promotion/career milestone as their top factor for deciding to attend NPS. Table 5 and Figure 1 illustrate the top ranking factor results by officer category. These results by officer communities may help the Navy distinguish what factors are important to each officer within a certain community on selecting a funded graduate program.

In order to investigate whether marital status or dependents played a role in the participants' decision to attend NPS, we looked at how many respondents selected an increase in quality of life as part of their top three reasons for attending NPS. Of the 35 participants, only 11 percent selected an increase of quality of life as part of their top three reasons for attending NPS. In the questionnaire, the given example for quality of life is increased time spent with family. The majority of the participants who selected the factor in their top three reasons selected this explanation within the questionnaire. Fourteen participants selected QOL as their top choice for attending NPS: three participants from URL, two from RL, and nine from SC. By gender, ten males and four females selected QOL. The following are the results by community: By years of service, the participants who selected QOL as their top choice for attending NPS were at different points in their career: one at 0–4 years of service, nine at 5–9 years of service, and four at 10-14 years of service. Given that less than half of the participants chose to attend NPS based on quality of life, it indicates that marital status and dependents are not leading factors in officers' decisions to attend NPS based on this study. The top factor selected by most participants is the effect on promotion and career milestones within their community.

Although the OPNAV instruction for graduate education provides guidance across all officer categories, each community dictates how and when officers are able to achieve a higher level degree as long as it is within the boundaries of the instruction. Unsurprisingly, the community factor played a big role in the participant's answers throughout this research because of the degree of freedom each community has on an officer's graduate education. Fifty-six percent of the URL participants selected Navy-funded graduate education as their top factor for attending NPS. The URL category represented the second largest group of participants from the research. Majority of the URL participants were under some kind of additional service requirement other than the service obligation for attending NPS such as Department Head SWO bonus or Aviation contract. This finding is consistent with the background of URL communities where most officers select graduate education during a shore tour as an "operational pause" from the Fleet. These trends categorized by the different Navy officer communities

illustrate to the Navy and its policymakers what currently attracts officers to fully funded graduate programs such as NPS.

b. Likelihood to Attend NPS if Service Obligation had been Extended

This section illustrates the results from the Likelihood to Attend NPS if Service Obligation had been extended portion of the interviews and focus groups. It provided valuable information on how the individual communities affected officers' decisions to obligate additional service in exchange for education benefits. Table 5 describes each community by percentage on whether officers would still choose to attend NPS based on an extended obligation with an increment of six months.

Table 5. Comparison of Results for Extending Obligation
by Officer Category

| Increment | URL | RL | SC |
|------------------|------------|-----------|-----------|
| 6 months | 67% | 86% | 75% |
| 12 months | 44% | 77% | 75% |
| 18 months | 33% | 68% | 50% |
| 24 months | 22% | 64% | 50% |

First, there was a wide range of answers for the URL community participants. The research respondents were majority SWO officers with several Aviation officers. Figure 2 illustrates the results for extending the obligation for attending NPS by officer category.

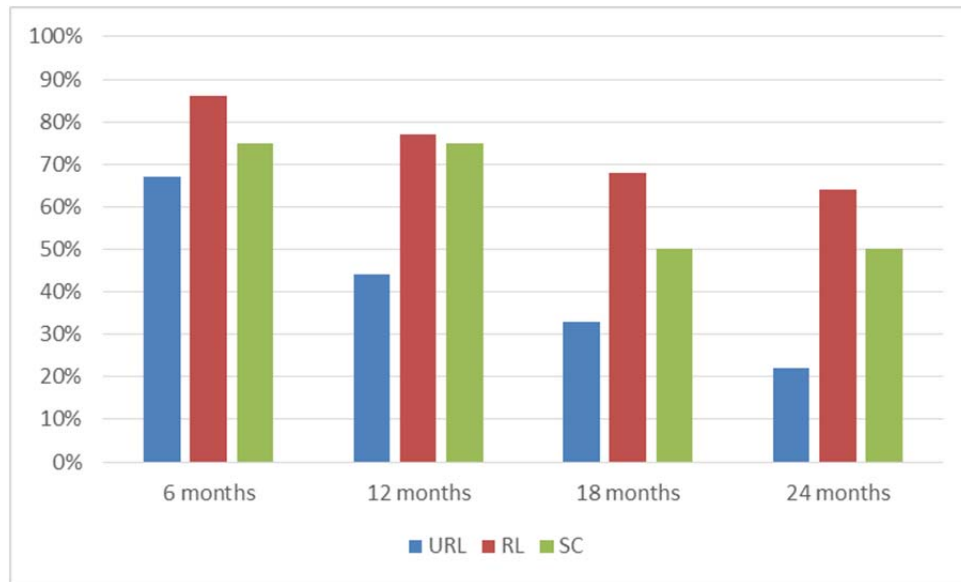


Figure 2. Results for Extending Obligation by Officer Category

The following is a breakdown of the results within the Likert scale from the URL community participants:

- 6 months: 67 percent of the participants would still choose to attend NPS if the service obligation were increased by six months. The primary factor affecting those who decided to still attend NPS was that the extended service obligation overlapped with their current commitment, such as the Department Head SWO Retention bonus.
- 12 months: With an extended service obligation of 12 months, only 44 percent would choose to attend NPS. This percentage represents the steep downward trend for URL officers within the study with each increase within the service obligation increment.
- 18 months: Only 33 percent of the URL participants would still choose to attend NPS based on an extended service obligation of 18 months. For most of the participants who chose not to attend NPS based on an extended 18-month payback, the additional time incurred would take them pass their current commitment. It would force them to stay longer within the naval service and they might not necessarily have decided to retire in the Navy.
- 24 months: With an extended service obligation of five years, only 22 percent would still choose to attend NPS

The URL community findings showed a steep downward trend of those who would still choose to attend NPS based on an extended service obligation. As majority of the URL officer participants did not select career progression as their top factor for attending NPS, it is consistent with Daggett's 2015 findings, which were that "utilization of a subspecialty achieved through an NPS graduate degree were not significant in promotion for URL officers" (2016, p. 47). Additionally, the factors affecting the URL officers' decisions at each increment were different compared to the RL officers. Therefore, it is important for graduate program policymakers to consider that different factors affect different communities across each officer category.

Second, most of the research participants were part of the RL community which is consistent with fact that majority of these officers are required by their community to earn a graduate degree and NPS is the primary graduate program for them. In terms of the Likert scale results, there was a narrow range of answers about whether or not to attend NPS based on an extended service obligation. The following is a breakdown of answers by six-month increment within the RL community:

- 6 months: 86 percent of the RL participants would likely to still choose to attend NPS if the service obligation were increased by six months. The common factors which affected their decision at this point is that the community still requires officers to earn a master's degree for promotion and progression within the community.
- 12 months: 77 percent of the participants would likely still choose to attend NPS if the service obligation were increased by 12 months. Of those who were not likely to attend NPS at this point, some of the factors that affected their decision were an additional 12 months would take them past their retirement of 20 years and it would also obligate some to do an additional two tours within their current community instead of one.
- 18 months: 68 percent would still likely choose to attend NPS if the service obligation were extended by 18 months. The downward trend of RL officers choosing to attend NPS based on an extended service obligation continues to steepen as the service obligation increases. Majority of those who selected to continue to choose NPS plan to continue their naval service until they retire. Another important factor that affects the same group of RL officers is that they would still choose NPS if their community continued to mandate a graduate degree for promotion or career progression.

- 24 months: About 64 percent of the RL officers would still choose to attend NPS based on an extended service obligation of 24 months or five years. Of those who were not likely to attend NPS based on an increase of 24 months in the service obligation, some of the factors that affected the decision point was they would select another graduate education program and the additional months would force them to stay in naval service longer than anticipated.

Despite the downward trend, over half of the RL officers who participated in the study would still attend NPS based on an extended obligation. This finding further shows that officer communities affect the decisions of officers on what graduate program to choose and not just whether it is valued in the community, but at what point in the career progression is it valued. RL officers highly value achieving a graduate degree in order to promote within the Navy and community, which is pertinent for policymakers to take into account when deciding to change the service obligation for funded graduate programs.

Similar to the RL community, the Staff Corps community had consistent results on the likelihood they would have made the same decision to attend NPS based on an extended service obligation. The majority of the communities within this Officer Category do value their officers to earn a graduate degree in order to progress within the community. The following is a summary of results from the Likert scale from the SC participants:

- 6 months: 75 percent of the participants would still have chosen to attend NPS if the service obligation were increased by six months. The primary factor affecting each participant's decision at this point is that they all plan to retire from the Navy so an extra several months is negligible.
- 12 months: The same percentage of participants would still have chosen to attend NPS if the service obligation were extended from three years to four years. All of the respondents still maintain the same factor for attending NPS is that they plan to retire from naval service.
- 18 months: Only 50 percent of the SC officers would have chosen to attend NPS if the service obligation were extended by 18 months. The other 50 percent who would not have chosen to attend NPS stated that the additional months would take them over the 20-year retirement mark.
- 24 months: The same amount of participants would still have chosen to attend NPS if the service obligation were extended to five years vice three years because they plan to retire at the 20-year mark from naval service.

The other half of the participants would not have chosen to attend NPS based on a five-year service obligation because they believed it was excessive time to pay back when the tour at NPS did not change and the additional time would take them beyond the 20-year retirement point.

The results from the SC community are consistent with prior studies on how the factor of community plays an important role in officers' decisions to attend fully-funded graduate education. This finding is consistent with Daggett's findings where Staff Corps officers within her dataset had the "highest utilization rate of about 47 percent among the other communities" (2016, p. 44). Compared to the URL officers, the SC officers have a set timeframe within their careers to earn a master's degree in order to promote within the Navy as well as the community. With this requirement, it not only supports Daggett's findings on how community characteristics play a significant role in the utilization rate of the subspecialty earned at NPS, but also how it affects officers' decisions to obligate additional service in exchange for funded education benefits.

The percentages and reasons for all communities are supported by the background and prior studies of each community. For the URL community, "SWO DH who earned a master's degree at any point within their careers are more likely to be retained within the community" (Clark, 2016, p. 25) and NPS is currently the main institution for SWOs and Aviators to earn a master's degree (BUPERS NPC, 2016b, p. 18); therefore, it makes sense that majority of the URL participants would still attend NPS with a six-month service obligation increase.

In comparison, over half of the RL participants would still choose to attend NPS because the additional time contributes to their goals to retire and they made the assumption that their still mandate a graduate degree for promotion and career progression. This result is supported by O'Sullivan's claim that earning a master's degree is part of the progression of a Navy HR officer because it is important for promotion and screening for milestone billets (2006, p. 3), which explains why most RL participants, specifically HR officers would still attend NPS based on an extended service obligation of 18 months.

c. Suggestions for Improving ROI for Full-Time Fully Funded Graduate Education

Participants were asked several questions relating to the Navy's return on investment for providing officers with full-time, fully-funded graduate education. First, they were asked what types of challenges or problems the Navy might encounter if it increased the service obligation. The researcher coded the themes for the focus group and interview responses. The themes were: timing, morale, retention/attrition, deterrent, no effect, and other.

For the URL community, there was no consensus on what challenges the Navy will face if they increased the service obligation for funded graduate education. Although 33 percent of the participants noted that an extended service obligation will cause retention and attrition issues for the Navy, the rest of the responses were spread across the other categories. The responses from the RL participants varied in a similar way to the URL participants in that not a major percentage chose one challenge the Navy would encounter for increasing the service obligation. However, the several categories that stood out among the responses were: retention/attrition, deter, and other/no response. Within those categories, 27 percent of the RL participants' responses coincided with the Navy encountering challenges in terms of increasing the service obligation will deter officers from choosing funded graduate education programs, such as NPS, to further their education.

In comparison to the URL and RL communities, 75 percent of the SC participants' responses unanimously selected the category of deterrent as the Navy's primary challenge if the service obligation were increased. The category of deter means that increasing the service obligation will discourage officers from choosing fully funded graduate programs in the Navy. In this case, the SC officers believed increasing the service obligation would encourage other officers to separate and find another avenue for graduate education. The rest of the SC participants at 25 percent believed that the additional obligation will cause the Navy to have retention or attrition problems. With respect to the Navy's challenges for increasing the service obligation for funded graduate programs, such as NPS, the overall theme from all of the communities' responses was

negative. Table 6 compares the results by community for what challenges the Navy will face if they increase the service obligation in order to increase the ROI.

Table 6. Comparison of Results for ROI Challenges by Officer Category

| Category | URL | RL | SC |
|---------------------|-----|-----|-----|
| Retention/Attrition | 33% | 18% | 25% |
| Timing | 11% | 9% | 0% |
| Morale | 11% | 5% | 0% |
| No Effect | 11% | 5% | 0% |
| Deter | 0% | 27% | 75% |
| Other/No Response | 33% | 36% | 0% |

In addition to probing about consequences to extending the service obligation, the respondents were asked for suggestions for improving the Navy's ROI for full-time, fully-funded graduate education. Specifically, they were asked, "If you were part of N127 Navy Graduate Education Policy department, then how might you solve the ROI problem?"

Again, the researcher coded the transcripts for reoccurring themes. These themes included:

- *Billets/follow-on tours*: Some participants stressed that if officers were immediately put into billets/follow-on tours that utilized the master's degree then the Navy would increase their ROI for fully-funded graduate education.
- *Graduate education quotas*: One suggestion was for the Navy and its detailers limit the graduate education quotas for fully-funded programs, then they would be able to increase the ROI and control it better.
- *Timing in career*: One participant recommended that the Navy and officer communities control when an officer can receive fully-funded graduate

education. For example, an officer who is mid-grade is a prime candidate for fully-funded graduate education because the Navy will be able to get its ROI.

- *Metric:* Another recommendation was for the Navy to change its metric for measuring the ROI for fully-funded graduate education. If the metric was changed to account for some of the skills obtained from the master's degree and within the current billet, then the ROI would naturally increase.
- *Increase service obligation:* Another participant advocated for increasing the service obligation for attending fully-funded graduate education through the Navy.
- *Incentives:* Another suggestion was for the Navy to offer an incentive to officers who selected to attend fully-funded graduate education despite the increase of service obligation. Specifically, the Navy would offer a monetary bonus to those officers.
- *Other/no response:* Within this theme, some participants offered the following suggestions to increase the Navy's ROI: create more subspecialty billets, change the negative stigma within communities for attending graduate school, and change the curriculum in NPS. Also, some chose not to offer a suggestion to increase the Navy's ROI.

For the URL participants, 78 percent of the responses suggested the Navy should change the detailing process or better manage the billets for the follow-on tours after officers earn the subspecialty degree. The rest of the responses were divided between limiting graduate education quotas by community and other/no response to a solution. One URL participant said, "Increasing the service obligation has no effect on pilots because majority will essentially get out of the Navy if they fail to select for 04." Overall, the URL participants believed increasing the service obligation for funded graduate education will cause negative effects. By better managing the billets for the follow-on tours, the Navy would not have to increase the service obligation for funded graduate education and just simply change the process of officers utilizing the degrees to make it more effective.

Comparable to the URL participants, 54 percent of the responses from the RL communities also suggested the Navy change the detailing process and better manage billets to solve the ROI problem with funded graduate education. However, the rest of

the results were varied and spread among several categories, which included: limit graduate education quotas by community, timing in career, changing ROI metric, and other/no response. The category of timing in career is defined as respondents suggesting the Navy limit graduate education to only Lieutenants and Lieutenant Commanders across communities to ensure the Navy receives the best ROI through multiple payback tours from the officers. Aside from the category of other/no response, 13 percent of the RL participants' responses suggested the Navy increase the service obligation or add an incentive for an increase in the service obligation to increase the ROI for funded graduate programs. An example of the incentive is to offer a monetary bonus for officers who select to attend NPS even with an extended service obligation. In support of this category, a HR participant said, "Increase the service obligation so officers self-select themselves whether to stay in Navy or not and it would be more fiscally responsible for Navy to get their ROI back." Overall, the RL participants suggested a variety of solutions to increasing the Navy's ROI for funded graduate education programs.

An RL participant said, "Increasing the service obligation for graduate education will lower morale for Junior Officers' planning to attend NPS and also disrupts the timing for the Navy in planning follow-on tours after NPS." Both the URL and RL participants in this research agreed that increasing the service obligation will negatively affect officers' decisions to attend funded graduate education, such as NPS; therefore, it will cause negative outcomes for the Navy. A Staff Corps participant said, "New retirement system may increase number of personnel getting out with a funded graduate degree and different responses from different communities." In combination with increasing service obligation, participants believe the new retirement system will encourage officers to separate from the Navy earlier.

The solutions from the SC participants were also similar to the URL and RL participants where 75 percent of the responses suggested the Navy better manage the detailing process for follow-on tours. In particular, one Supply Corps participant suggested to "Make the billets more available because currently the subspecialty billets for Supply Corps offices are held by gate keepers who dictate what officers will fill billets." By releasing the control of the billets to the detailers, the Navy would increase

their ROI, specifically for the SC community, because more officers would be able to utilize their subspecialty degrees. At 25 percent, the rest of the SC participants' suggested the Navy only offer graduate education to Lieutenants and Lieutenant Commanders in order to get a maximum ROI on funding their graduate education programs. From changing the process of follow-on tours to changing the timing the Navy offers graduate education, majority of the participants had helpful suggestions for policymakers to consider for increasing the Navy's ROI instead of increasing the service obligation for funded graduate education programs. Table 7 shows a comparison of results for alternate solutions to increase the Navy's ROI by officer category.

Table 7. Comparison of Results of Solutions to ROI Problem
by Officer Category

| Category | URL | RL | SC |
|--|-----|-----|-----|
| Billets/Follow-on Tour | 78% | 54% | 75% |
| Grad Ed Quotas | 11% | 5% | 0% |
| Timing in Career | 0% | 5% | 25% |
| Metric | 0% | 5% | 0% |
| Increase service obligation/incentives | 0% | 13% | 0% |
| Other/No Response | 11% | 18% | 0% |

2. Results by Gender

As shown from previous studies (Daggett, 2016), gender has always shown to be a significant factor in explaining retention or utilization. Daggett found that “although females had a higher utilization rate of subspecialties than males, it was because they represented a smaller portion of the sample” (2016, p. 55). This section describes the results of motivation factors, hindsight of increasing service obligation, and ROI by the factor of gender.

Daggett's findings had an issue with obtaining ample representation of females within the sample to draw a conclusion worth noting. However, this research on Navy-funded graduate education had more than enough females within its sample of resident Navy NPS students. There were a total of 35 participants whom were interviewed throughout the study, which comprised of 17 females and 18 males. Among the participants, females represented almost half of the sample at about 49 percent.

a. Motivation Factors to Attend NPS

Sixty-one percent of male participants selected promotion/career milestone as their top motivation factor for attending NPS, which influenced their decision to choose a funded graduate education in the Navy. The second highest factor for males was Navy-funded education, which 22 percent of the participants selected. This category means the participants chose to attend NPS because it was a fully-funded graduate program. The rest of the participants' primary factors were spread evenly among the rest of the categories.

In comparison to the male participants, the primary factor for the female participants attending NPS was also promotion/career milestone, which 59 percent of the respondents selected. The second highest factor for female participants was Navy-funded education, which the rest of the respondents, at 35 percent, selected. As majority of both genders selected the same top factor, it demonstrates to policymakers that both males and females within this study consider promotion/career milestone as well as a funded graduate degree as the main reasons for selecting a graduate program. These findings also demonstrate how the factors of the decision process for both male and female participants, whom have already made the decision to attend NPS, think similarly in that in order to stay within the naval service. Table 8 demonstrates the results of motivation factors by gender.

Table 8. Results of Motivation Factors by Gender

| Factors | Male | Female |
|----------------------------|-------------|---------------|
| Promotion/Career Milestone | 61% | 59% |
| Quality of Life | 6% | 0% |
| Benefit Post-Navy Career | 6% | 0% |
| Navy-funded Education | 22% | 35% |
| Other | 6% | 6% |

Although this result may be due to majority of the participants being from the RL community, it demonstrates there really is not a difference with respect to gender among officers about the decision to choose a graduate program. Instead, the results direct the readers and policymakers towards the community factor as a more pertinent factor at least among this sample of naval officers. As there was no difference in the ranking factors among the males and females, policymakers should note that officers in general highly regard progression in the Navy and communities as the most important fact to take into consideration when choosing a graduate program.

b. Likelihood to Attend NPS if Service Obligation had been Extended

Along with the ranking factors, the results from Likert Scale among the participants also provided valuable information on whether gender was an important factor by indicating whether or not any gender was more likely to still choose to attend funded graduate education. The following is a breakdown of the Likert scale the results by female participants on whether they would have made the same decision to attend NPS based on an extended service obligation:

- 6 months: Over 80 percent of participants said they would likely still make the same decision to attend NPS if the service obligation were increased to three years and six months. The two main reasons given were that their communities still required a graduate degree for promotion and the additional service was within their timeframe to retire from Navy at 20 years.

- 12 months: There was a decrease in the percentage of female participants deciding to still attend NPS if the service obligation were increased from three years to four years. Only about 65 percent of participants were likely to still make the same decision to attend NPS at this increased increment of obligated service. Some of the common factors affecting their decision at this point were that this additional time would take them beyond their retirement mark of 20 years as well as force them to obligate more time in the naval service than they currently plan to serve.
- 18 months: Despite a steeper decrease in percentage, about 53 percent of female participants would still choose to attend NPS based on an extended service obligation of 18 months. Some of the reasons affecting decisions at this point are the following: plan to retire, additional service is within current community commitment, and life circumstances.
- 24 months: With an increase of 24 months to the service obligation, the same percentage of the female participants would still make the same decision to attend NPS for the same reasons as indicated in prior increment of 18 months. For those participants who were very unlikely to make the decision at this point, some of the reasons affecting their decision were the following: use GI Bill to fund graduate education, excessive payback for graduate education, and obligates additional tours after NPS.

These results indicate that over half of the female participants were still likely to make the same decision to attend NPS in addition to obligating additional service in return. Since females represented about half of the sample, the findings provide a noteworthy conclusion based on gender, which Daggett was unable to do because females represented a very small portion of her dataset. Table 9 lists the results of those officers who would still attend NPS based upon an increase in the service obligation by gender.

Table 9. Results of Increasing Service Obligation by Gender

| Increment | Male | Female |
|------------------|-------------|---------------|
| 6 months | 78% | 80% |
| 12 months | 72% | 65% |
| 18 months | 61% | 53% |
| 24 months | 50% | 53% |

This section describes the results based on male participants' responses on the likelihood of attending NPS in exchange for obligating additional service. As males represented over half of the sample, the findings and analysis are valid since they characterize a good portion of the sample. The following is a summary of Likert scale results on the male participants' response on whether they would have made the same decision to attend NPS based on an extended service obligation:

- 6 months: With an additional service obligation of three years and six months, 78 percent of the male participants were likely to still make the decision to attend NPS. The following were common reasons affecting their decisions: community still mandates a graduate degree, plan to retire from Navy in 20 years, and overlaps with current community commitment.
- 12 months: 72 percent of participants were still likely to make the same decision to attend NPS and obligate an additional 12 months of service after graduating from NPS in return. The factors affecting their decisions at this point are the same as those indicated in the previous increment of six months.
- 18 months: With an additional service of three years and 18 months, only 61 percent of the male participants were likely to still attend NPS. The primary factor affecting those who decided to not attend NPS based on this additional service was that it obligates additional unintended service in Navy.
- 24 months: Only 50 percent of the respondents would still make the same decision to attend NPS as well as obligate additional service of up to five years vice three years. Those who were unlikely to make the same decision felt the additional service was excessive and it affected their decision on possibly getting out of the naval service in the long run after NPS.

Along with the results of the female participants, the responses from the male participants within the Likert scale indicate that gender does not play a major role in officers' decisions to obligate additional service in exchange for attending NPS. A female SWO participant said, "The additional time is similar to a deployment," when affirming that she would still attend NPS even with the possible six-month increase in service obligation. In comparison, a male SWO participant commented that the additional increase in service obligation overlaps with current commitment so he would still choose to attend NPS. In comparing both participants and holding constant their

community, the factor of gender does not play a role in their determining if they would still attend NPS based on an extended service obligation of six months.

A male METOC participant said, “I would still attend NPS if the obligation were increased by 12 months because it is still a community requirement and I desire to retire in the Navy.” As mentioned in the NPC, “NPS is the primary source of graduate education for most of the METOC officers because the community comprises of mostly accessions” (BUPERS NPC, 2016b, p. 29). However, a male EDO participant said, “My follow-on tour is three years so the additional 12 months might require an additional tour that I would need to discuss with my family.” In comparing both male participants and holding their gender constant, the factors affecting both officers’ decision to attend NPS are different where the METOC officer would still attend NPS because it is a community requirement and he desires to retire in the Navy while the EDO officer would still attend NPS but would have to consider his family situation at the time.

Ranging from community requirements to plans to retire, both genders had similar factors affecting their decisions at each increment of increase with the service obligation. Also, the fact that both genders were equally represented within the sample demonstrates how the results were not influenced in one direction. Although the factor of gender was not significant in officers’ decision to obligate more service in exchange for attending NPS, perhaps the years of service factor is more beneficial for the Navy and its policymakers to consider when deciding to change the service obligation for fully funded graduate education programs.

c. Suggestions for Improving ROI for Full-Time Fully Funded Graduate Education

This section describes the participants’ responses about the ROI challenges and solutions by gender. As previously described in the community section, the researcher utilized the same categories to organize the answers for both questions. For the ROI challenges, majority of male participants’ responses did not fit into any of the categories or did not have a response to the question. Some of the other ROI challenges included: insufficient number of billets for follow-on tours, ROI challenge does not apply to SWO

community, and increasing service obligation will not help the ROI. The second highest category is retention and attrition where 28 percent of the male participants' responses fit into this grouping. With the exception of the morale category, rest of the male responses evenly fit into the remaining categories: timing, deter, and no effect. In general, the male participants believe the Navy will primarily face retention and attrition issues if the service obligation was increased in order to increase the ROI for officers attending NPS.

In regards to the female participants, there was a three-way tie among the categories between the primary challenge the Navy will face for increasing the service obligation, which included: retention and attrition, deter, and other or no response. Each of the three categories fit 29 percent of the female participants' answers to the question. At six percent, the second highest category was two-way tie between the timing and morale category. Under the other category, a female participant suggested that increasing the service obligation to try to increase the ROI for funded graduate education does not apply to the SWO community because it is more of a matter between sea versus shore rotation. Despite the variation of results among both males and females, the consensus among both genders is that increasing the service obligation to possibly increase the ROI will have a negative impact on officers in the Navy. Table 10 illustrates the results as described in this section.

Table 10. Results of ROI Challenges by Gender

| Category | Male | Female |
|---------------------|------|--------|
| Retention/Attrition | 28% | 29% |
| Timing | 1% | 6% |
| Deter | 11% | 29% |
| No Effect | 11% | 0% |
| Morale | 6% | 6% |
| Other/No Response | 33% | 29% |

The results of solutions to ROI problem by gender are defined in the following paragraph, which also utilizes the same categories as described in the community section. For the male participants, over 56 percent of the responses corresponded with the category of billets and follow-on tours. Males believed that the Navy can increase their ROI for funded graduate programs by better managing the detailing process for follow-on tours as well as creating more subspecialty billets. The second highest solution is for the Navy to increase the service obligation for funded graduate education and to add an incentive for officers who obligate additional service in exchange for graduate education. Overall, majority of the male participants suggested the Navy should increase the number of billets and effectively manage the detailing process in order to solve the ROI problem without increasing the service obligation. Table 11 lists the results of alternate solutions for increasing the ROI by gender.

Table 11. Results of Solutions to ROI by Gender

| Category | Male | Female |
|--|------|--------|
| Billets/Follow-on Tour | 56% | 59% |
| Grad Ed Quotas | 0% | 6% |
| Timing in Career | 6% | 6% |
| Metric | 0% | 6% |
| Increase service obligation/incentives | 22% | 6% |
| Other/No Response | 16% | 17% |

In her 2016 master's thesis, LT Daggett found that utilization rate for officers with degrees funded by the Navy and within the URL communities is the lowest out of all the officer categories at 6.7 percent (p. 28). Despite the low utilization rate for URL communities, both sexes from all three officer categories recommended the Navy effectively manage their billeting process in order to increase the ROI by having more officers utilize their subspecialty degrees. A female SWO participant said, "Have students serve in billets if gapped in between graduate and DH school to increase payback and ensure subspecialty is used in follow-on tour.

At 59 percent of responses fitting into the category, the female participants also suggested the Navy increase the ROI for funded graduate programs by effectively managing the billeting process for follow-on tours. The second highest solution from the participants was the other or no response category with 17 percent of the solutions fitting this grouping. The rest of the responses were evenly spread among the following categories at six percent: limit graduate education quotas, look at the timing in career of offering graduate education, change the ROI metric, and increase the service obligation as well as add an incentive for extended service obligation. Despite the variation in solutions, majority of both the male and female participants believe that to achieve a higher ROI for sending officers to graduate programs, the Navy must effectively manage the detailing process to ensure officers utilize the subspecialties in a follow-on tour.

3. Results by Years of Service

This section describes the results of motivation factors, hindsight of increasing service obligation for funded graduate education, and ROI divided by years of service among the participants.

In addition to variation of officer designators, the participants also varied in years of naval service. The researcher categorized the years of service into four-year increments, which included: zero to four, five to nine, ten to fourteen, and fifteen and greater. At the zero to four-year increment, the least amount of participants, at 14 percent, were part of this category. At 57 percent, the majority of the officers who participated in the study had been in the Navy between five and nine years. The second

largest amount of participants, at 29 percent, had between 10 and 14 years of naval service. Since there were no participants with 15 years of service or greater, the category is not discussed in the results for the three questionnaire categories. Table 12 exhibits the results of participants by years of service.

Table 12. Results of Participants by Years of Service

| Years of Service | No. of Participants | % of Participants |
|------------------|---------------------|-------------------|
| 0-4 | 5 | 14% |
| 5-9 | 20 | 57% |
| 10-14 | 10 | 29% |
| 15 and greater | 0 | 0% |

a. Motivation Factors to Attend NPS

The categories used to divide the motivation factors by years of service are the following: promotion and career milestone, quality of life, benefit to post Navy career, Navy-funded education, and other. These sections are the same divisions used to divide the results for the previous factors of community and gender. The motivation factor of promotion and career milestone was the highest percentage among all three increments for years of service. The following are the percentages of participants who chose promotion and career milestone as the top factor for attending NPS for 0–4 years, 5–9 years, and 10–14 years’ increment: 60 percent, 50 percent, and 70 percent, respectively. For 0–4-year increment, the second highest motivation factor was a two-way tie between Navy-funded education and other with 20 percent of participants selecting each factor. The only other factor for this increment was a participant commented that NPS was the only favorable option within slate provided by detailer at the time.

At 40 percent, the second highest motivation factor for participants with 5–9 years of service was Navy-funded education. The rest of the participants within this year of service increment selected quality of life and other as under the motivation factors at five

percent selection for each of the two factors. The only other motivation factor was a participant commented that selection into a specific NPS curriculum was non-dependent on undergraduate GPA. At the last increment of years of service, those who had 10–14 years of service selected Navy-funded education as their second highest motivation factor with 20 percent selection rate. The rest of the participants with a 10 percent selection rate selected benefit to post Navy career as their last motivation factor for this increment for years of service. Despite a clear selection of the top two motivation factors across all three sections for years of service, there was a variation in the last selection of motivation factors for the rest of the participants across the increments. Table 13 lists the results of motivation factors results by years of service.

Table 13. Results of Motivation Factors by Years of Service

| Factors | 0-4 years | 5-9 years | 10-14 years |
|----------------------------|------------------|------------------|--------------------|
| Promotion/Career Milestone | 60% | 50% | 70% |
| Quality of Life | 0% | 5% | 0% |
| Benefit Post-Navy Career | 0% | 0% | 10% |
| Navy-funded Education | 20% | 40% | 20% |
| Other | 20% | 5% | 0% |

Regardless of the number of years of service, officers within this study chose to attend NPS to further their career in the Navy; therefore, it can be concluded that officers select a graduate program based upon the affect it has upon their careers. For the HR community, O’Sullivan states, “the career progression of the HR Officer typically allows for earning a master’s degree as a Lieutenant (O-3) or as a junior O-4” (2006, p. 4). A female HR officers with ten years of service commented about her top factor for attending NPS is, “Master’s degree to be competitive in community and Navy career.” As majority of the participants are from the RL communities, it supports the fact that majority of the participants have between 5–9 years of service because most of the RL communities are made up of accessions from other officer communities. It can be concluded that the participants with less service are still trying to figure out what is

important to them with their career, which is different from the more senior officers who, based on the results, appear to know what they consider important.

b. Likelihood to Attend NPS if Service Obligation had been Extended

To report the results for Hindsight of Increasing service obligation Likert Scale, the same increments were used as in the previous sections, which were: 6 months, 12 months, 18 months, and 24 months. The percentages represent those participants within those categories of years of service who would still choose to attend NPS based on the extended time to the service obligation. At the first increment of an increase of six months, majority of participants regardless of years of service would still choose to attend NPS. The results at the six-month increment for 0–4 years, 5–9 years, and 10–14 years are the following: 80 percent, 85 percent, and 70 percent, respectively. At the 12-month increment, the only category to decrease in percentage and would not choose to attend NPS with an extended payback are those who have between 5–9 years of service. The results at the 12-month increment for 0–4 years, 5–9 years, and 10–14 years are the following: 80 percent, 60 percent, and 80 percent, respectively.

With an additional 18 months to the service obligation, the results show a decline in participants, who have between 5–9 years and 10–14 years of naval service, in choosing to attend NPS at 50 percent and 60 percent, respectively. Those participants who have between 0–4 years of service remain the same with 80 percent of them still choosing to attend NPS despite the additional 18 months to the service obligation. Lastly, with an additional 24 months added to the service obligation, only 40 percent of participants with 5–9 years of service and 60 percent of participants with 10–14 years of service would still choose to attend NPS.

The results for participants with 0–4 years of service is the same as the previous increment where 60 percent of participants would still choose to attend NPS despite the additional 24-month obligation to the original service obligation. In summary, the participants with 0–4 years remained constant throughout the increasing of service obligation, while there was variation in the percentages for those participants who have 5–9 years and 10–14 years of service about choosing to attend NPS as the increment for

additional obligation increased. A female participant with six years of service commented about the factor affecting her decision to attend NPS based on an extended payback of 24 months as, “Requires two additional tours and restricts options in terms of planning ahead.” In comparison, a female participant with 11 years of naval service said, “she would still choose to attend NPS based on an extended service obligation of 24 months because it is a good deal for graduate education.” As the obligation for the service obligation increases, there is a steep decline in the amount of participants, who have more years of service, in wanting to still attend NPS.

Table 14 lists the results by years of service for the results of increasing the service obligation.

Table 14. Results of Increasing Service Obligation by Years of Service

| Increment | 0-4 years | 5-9 years | 10-14 years |
|------------------|------------------|------------------|--------------------|
| 6 months | 80% | 85% | 70% |
| 12 months | 80% | 60% | 80% |
| 18 months | 80% | 50% | 60% |
| 24 months | 80% | 40% | 60% |

c. Suggestions for Improving ROI for Full-Time Fully Funded Graduate Education

The results for ROI challenges by years of service are described using the same categories used as with the community and gender factor results. The categories according to years of service include: timing, morale, retention and attrition, deter, no effect, and other or no response. For participants with 0–4 years of service, 60 percent selected the main challenge for Navy increasing the ROI by increasing the service obligation is that it will deter officers from selecting funded graduate education. The second highest challenge for this years of service increment is a two-way tie between retention and attrition as well as other or no response at 20 percent selection for each.

For participants with 5–9 years of service, the category with the highest percentage is other or no response at 35 percent of participants’ responses fitting this section. Some other categories that participants in this increment described include:

additional service obligation and changes to retirement system will play a role in younger JO making the decision to attend NPS and does not make sense in SWO community to increase service obligation beyond 12–18 months more due to shore versus sea tracker. The second highest percentage for 5–9 years of service increment was retention and attrition at 25 percent. The third challenge that ten percent of participants with 5–9 years of service believe will affect the Navy is a two-way tie between morale and no effect. The last challenge that five percent of participants in this increment believe the Navy will face if they increase the service obligation is timing in officers' careers. A female participant with six years of service said, "Rather use GI bill to get master's and don't want to commit five years after NPS." On the other hand, a male participant with nine years of service said he would still attend NPS based on an extended service obligation because, "A community requirement and desire to retire in Navy."

For participants with 10–14 years of service, there was a two-way tie between the top challenge, which was deter, and other or no response with a 30 percent selection rate. Some of the other categories include: not enough billets to place all students in using curriculum directly after NPS and do not just increase ROI but increase incentives for certain degrees. The rest of the participants in this increment of years of service selected timing as well as retention and attrition as the second highest challenge that the Navy will experience if the service obligation were increased. At 20 percent selection rate for both categories, the participants with 10–14 years of service believe that increasing the service obligation will affect the retention of officers in the Navy and affect the timing in officers' careers. Overall, there was not a single challenge that all years of service increments came to a consensus on; however, the theme from all participants regardless of years of service is that increasing the service obligation will result in detrimental challenges for the Navy. Table 15 lists the results of ROI challenges by years of service.

Table 15. Results of ROI Challenges by Years of Service

| Category | 0-4 years | 5-9 years | 10-14 years |
|---------------------|-----------|-----------|-------------|
| Timing | 0% | 5% | 20% |
| Morale | 0% | 10% | 0% |
| Retention/Attrition | 20% | 25% | 20% |
| Deter | 60% | 15% | 30% |
| No Effect | 0% | 10% | 0% |
| Other/No Response | 20% | 35% | 30% |

As illustrated by the results, there was not a single challenge across all years of service (YOS) increments that the Navy would encounter if the service obligation were increased. However, the overall theme is that increasing the service obligation beyond six months will result in detrimental challenges for the Navy. As indicated in the Background chapter, most of the communities, from URL to Staff Corps, value a graduate degree for an officer to be promoted or advanced within their communities.

The following paragraph describes the results of alternate solutions to increasing the Navy's ROI by participants' years of service. The solutions are divided into the following categories: billets and follow-on tour, graduate education quotas, timing in career, metric, increase service obligation and incentives, and other or no response. These categories are the same used to describe the ROI solution results for the community and gender factors. The primary solution for the Navy to increase its ROI for graduate education across participants from all years of service is to better manage billets and follow-on tours. From the least to the most years of service, the results for the billets and follow-on tour category, which most participants believed would increase the ROI, are the following: 60 percent, 65 percent, and 60 percent, respectively. A male participant with 14 years of service said,

“Navy needs to better use people and their degrees in a specific field. Put officers in payback tour to utilize subspecialty. Be more selective in who attends NPS.”

In addition, another alternate solution suggested by a female participant was to alter the metric, which the Navy uses to measure utilization of subspecialty degrees. This same participant with ten years of service said, “Reevaluate standards in how Navy counts ROI. Possible change the standards and maybe the ROI will increase naturally.”

Aside from the top solution, the rest of the solution categories vary across each years of service increment. For participants with 0–4 years of service, the second category with the second highest percentage is other or no response in terms of ROI solutions. For participants with 5–9 years of service, the second category with the next highest percentage is a two-way tie between increase the service obligation and incentives for graduate education as well as other or no response. With a five percent selection rate, the rest of the participants at this increment believe that offering graduate education at certain times in officers’ careers will increase the Navy’s ROI.

Lastly, participants with 10–14 years of service had the most variation in results among the solution categories compared to the other years of service increments. The next category with the second highest percentage was equally split among the following categories: limit graduate education quotas, timing in career, change ROI metric, and other or no response. Each of the categories had ten percent of the participants with 10–14 years of service select the ROI solution within the category. As a result, the unanimous consensus among the participants regardless of years of service is that the primary solution to increasing the Navy’s ROI for funded graduate education is to effectively manage the billets and follow-on tours for officers. Table 16 shows the results of ROI solution by Years of Service.

Table 16. Results of ROI Solutions by Years of Service

| Category | 0-4 years | 5-9 years | 10-14 years |
|--|-----------|-----------|-------------|
| Billets/Follow-on Tour | 60% | 65% | 60% |
| Grad Ed Quotas | 0% | 0% | 10% |
| Timing in Career | 0% | 5% | 10% |
| Metric | 0% | 0% | 10% |
| Increase service obligation/incentives | 0% | 15% | 0% |
| Other/No Response | 40% | 15% | 10% |

C. CHAPTER SUMMARY

This chapter provided an analysis of the results and data collected from the questionnaire and discussions conducted during focus groups and interviews with NPS students as the participants. The focus of the research is on identifying the main factors naval officers consider when deciding to obligate additional service in exchange for attending fully-funded graduate education, NPS. In the beginning, we hypothesized that results might vary by community, gender, and years of service. Our assumption was based on Daggett's study about the utilization of subspecialties with an emphasis on whether "community characteristics, gender, and years of service affected an officer's ability to fulfill a subspecialty billet" (2016, p. 30). After examining and discussing the results, the factors of community and years of service appear to be the pertinent influences on officers' decisions about which funded graduate program to select. The results based on gender did not present distinguishable differences among the three questionnaire categories: motivation factors, hindsight of increasing service obligation, and ROI challenges and solutions.

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VI. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

A. SUMMARY

This thesis examined how naval officers across different communities make decisions to attend funded graduate education at NPS, based on personal preferences, career milestones and potential service obligations. The main goal was to gain insights into how service obligation policy changes might affect career milestone behavior, community retention, and attendance of Navy funded graduate education.

The study in this thesis found that each officer community managed and executed Navy graduate education policy somewhat differently. Therefore, the effect of increasing the service obligation in order to increase the Navy's ROI may have different outcomes by officer community. This thesis establishes a baseline by which the policymakers can establish a foundation to better understand the differences and similarities in each community regarding graduate education requirements.

After examining and analyzing the results based on a survey and discussions conducted during focus groups and interview discussions with 35 NPS resident students, community and years of service are all highly influential on officers' decisions about which funded graduate program to select. An analysis by gender did not present any distinguishable differences by male and female officer's decision making regarding attendance of funded education at NPS. The results of the qualitative responses from each participant provided useful feedback and guidance on possible policy approaches to increase the Navy's ROI. Officers who consider funded graduate education are also simultaneously concerned with furthering their careers, both, within their respective communities, as well as within the Navy. The Navy's Graduate Education Policy department and its sponsors should consider these factors in their decision to increase the ROI for fully funded graduate programs because it will not affect some communities where graduate education is a requirement.

B. CONCLUSIONS AND RECOMMENDATIONS

a. *Research question #1—What factors are most critical to the decision of Navy officers to pursue fully funded graduate education?*

(1) Conclusion

The results show the most critical factor that officers take into consideration when deciding whether or not to pursue fully-funded graduate education at a certain time is the effect on promotion and career milestones within their community. Regardless of gender or years of service, the officer participants selected promotion and career milestone as their top factor taken into consideration when deciding what graduate program to select. In terms of motivation factors, community illustrated a significant difference among the participants. The URL communities chose Navy-funded graduate education as their top factor for deciding to attend NPS, while the RL and SC communities selected promotion or career milestone as their top factor.

Based upon the three initial categories considered for analyzing the results, the community played a significant role in explaining officers' decisions in terms of graduate programs over gender and years of service. As a result, an officer's community is the most important factor for the Navy and its graduate education sponsors to consider when deciding to change the service obligation for funded graduate programs. The categories of gender and years of service did not result in significant differences among the participants' responses, which does not mean that they are not important, but both have lower significance in the relationship to the community factor.

(2) Recommendation for N127 Navy Education

Based on the results for this thesis, naval officers who are considering furthering their education through fully funded programs highly value promotion and progression within their communities and the Navy. Therefore, it is important for communities to allow officers the opportunity to not only pursue a graduate degree that will benefit them in their careers but also the chance to utilize the degree to gain experience. The Navy Graduate Education Policy (N127) department and officer communities need to work

together to maximize the Navy's ROI for sending officers to graduate school. One way to accomplish this maximization of ROI is for communities to shift away from the negative cultural perception when officers utilize their shore tours to attend graduate school. Regardless of the factors, the Navy needs to ensure the primary goal of sending officers for graduate education matches the end results. Then, the Navy needs to ensure that the officer categories and communities are following through with the guidelines within their respective communities so as a whole, the Navy is meeting its ROI for sending officers to further their education.

b. Research question #2—What is the likely effect of change in the service obligation for Navy fully-funded graduate education on the decision to pursue graduate education for different officer communities?

(1) Conclusion

Each officer community manages and values graduate education differently. Some communities value graduate education prior to entering the Navy, such as the Nurse Corps and Medical Service Corps. On the other hand, there are some communities that require officers to earn a specialized master's degree, but also obtain a graduate degree within their milestones, such as Human Resources and Information Warfare communities. Additionally, there are some communities, such as the Explosive Ordnance Community and INTEL community, who value graduate education, but also simultaneously highly value officers to utilize their shore tours for competitive tours. By managing and valuing graduate education differently, the communities make it difficult for the Navy and its policymakers for graduate education to ensure a maximized ROI for sending officers to through funded graduate programs.

(2) Recommendation for N127 Navy Education

N127 should provide strong guidance to community managers and officer assignments to encourage sending officers to subspecialty immediately after receiving graduate education. This would support maximizing the Navy's ROI for graduate education programs. The communities would remain empowered to manage and value

graduate education differently, which could lead to different retention outcomes without increasing the minimum service obligation. For example, in the Nurse Corps community, majority of its officers already have a master's degree in their subspecialty prior to commissioning so the curriculum options for fully-funded graduate education are in other subspecialties. Based upon the interview results, the extension of service obligation is not an issue in retaining or attracting future Nurse Corps officers. However, the extension of the service obligation for funded graduate education is an issue for SWO officers.

Second, the Navy could advocate for all communities to value graduate education in the same way across communities or at least across officer categories. For example, if each community made Navy-funded graduate education necessary for promotion selection instead of career progression then the extension of minimum service requirement would be favorable for both the Navy and its communities. In using the examples of the Nurse Corps officers and SWO officers, if graduate education was required for promotion then an extension in service obligation would not be an issue for either of the communities. Overall, Navy and the Graduate Education sponsors need to consider targeted graduate education opportunities by officer category and community because of the individual demand by each.

c. Research question #3—Can the Navy increase its return on Navy fully funded graduate education through a change in the service obligation?

(1) Conclusion

The Navy can increase its return on investment for Navy fully funded graduate education by changing the service obligation and requiring current officers to serve an additional obligation to utilize their subspecialties. However, for future officer graduate students, the increase of the service obligation, beyond six months from its original payback of three years, will discourage officers from selecting funded graduate programs, such as NPS. If the increasing of the service obligation is only for fully funded graduate programs, then officers will be encouraged to find other programs funded, fully or partially, to earn a master's degree. In extreme cases, the increasing of the service obligation for graduate programs will also force officers to self-select out of the Navy to

pursue graduate education through another avenue, such as the GI Bill or through a civilian corporation.

(2) Recommendation for N127 Navy Education

The Navy and curriculum sponsors for graduate education should work closely with the detailing departments for each community to ensure billets are filled first where officers can utilize their subspecialty degrees. If an officer is required to serve in a milestone billet first, then the detailer needs to ensure the officer utilizes the subspecialty degree in a follow-on tour before being able to separate from the Navy. Another option is for the DOD and the Navy to reevaluate the metric used to measure the utilization of graduate degrees and determine if there is a way to measure utilization in current billets. By changing the metric for measuring utilization, the ROI may naturally increase by coding billets that use some, if not all, aspects of the subspecialty.

d. Research question #4—What are the trade-offs from an increase in the service obligation?

(1) Conclusion

Based upon the feedback and results from the focus groups and interview participants, current officer graduate students believe the current service obligation for fully-funded graduate programs, such as NPS, is the correct length of an obligation. It is a valid trade-off in terms of time spent in the graduate program and time obligated in service afterwards. The effects and trade-offs for increasing the service obligation beyond six months is negative and will not benefit the Navy. The trade-offs from an increase in the service obligation include the following: discouraging officers to select fully-funded graduate programs, lowering morale among officers, and encouraging officers to seek furthering their education outside of the Navy.

The Navy would benefit greatly from requiring a utilization tour for the subspecialty degree received as opposed to a time obligation for attending fully funded graduate education. Therefore, the obligation would not be framed as a time requirement, but yet a utilization requirement. In this way, the officer would not be allowed to

separate from naval service until he or she has served in a billet utilizing the subspecialty degree received and paid for by the Navy. Based on the current metrics used to measure utilization, the Navy would ensure its ROI is maximized for all officers who attend fully funded graduate programs.

Based on the research's results, detailers need to effectively manage follow-on billet opportunities to allow for an increased return on investment to their respective communities as well as the Navy. By effectively managing billets and follow-on tours to ensure utilization, the Navy would be saving money by increasing its ROI and using managers, the detailers, who are already being paid to ensure the "spaces" are filled with "faces." An important part of efficiently managing billets is to ensure that the same officers who already have experience in the billets are not being placed into those billets. By prioritizing those billets to officers with a graduate degree and no experience, it allows the Navy and the respective communities to cost-effectively increase the ROI for funding the graduate programs.

(2) Recommendation for N127 Navy Education

My recommendation for the Navy is to not increase the service obligation for fully funded graduate programs beyond an additional six months from the original obligation. Instead, the Navy should examine other ways to increase the ROI by creating more "Q-coded" billets that utilize the subspecialty degrees and ensuring the current billets are not being filled by the officers who already have experience within the position. Officers who have recently earned their graduate degrees should be the priority in filling utilization billets, so they are able to gain experience and fulfill the Navy's ROI. I understand that by increasing the number of billets then the student account budget will increase and the resource sponsor/community will have to pay for the additional billets. However, it is possible that the cost of extra billets could increase the Navy's ROI for graduate education. By examining other ways to increase the ROI, the Navy and its sponsors for graduate programs are managing expectations in terms of ensuring the maximum ROI is achieved.

C. FURTHER RESEARCH

This section describes discussion points for further research that this thesis did not cover, but would be beneficial to the Navy and its sponsors for graduate education to explore to increase the ROI.

a. *How to Formulate Survey Tool for Navy Officers Fleet Wide*

Due to time constraints, the study participants surveyed in this research was limited to resident Navy students at NPS. This limited the feedback received about graduate education policy changes. A larger-scale survey would be beneficial to the Navy and the sponsors for graduate education in order to get a larger sample of participants, with more variation in background characteristics (community, gender, years of service, etc.) and additional feedback from more officers across the Fleet. This survey would reach officers who have already attended graduate school and those who are considering funded graduate programs within the Navy. The survey developed in this thesis can serve as a pilot for the large-scale survey. First, the larger survey for Navy officers across the Fleet should be done electronically to ensure maximum dissemination, which increases the chances of more feedback about graduate education. Second, the survey should include the following two sections used within this thesis: motivation factors for attending graduate school and hindsight of increasing the service obligation for funded graduate programs. By using the same sections, the researcher for the larger scale survey can compare results by using this thesis as a foundation.

Third, commanding officers and leadership across the Fleet should highly encourage their officers to complete the survey to ensure accurate and diverse feedback is received about graduate education. With accurate feedback, the Navy and its leadership guarantees its officers that their opinions were taken into account when making the decision about increasing the service obligation for funded graduate programs. Lastly, demographic information should be captured within the larger scale survey to compare results across other factors that the Navy and sponsors consider important. In comparing the feedback with the demographic information, researchers will get a better insight on

the differences among officers with their opinions towards graduate education and what factors affect their decision.

b. Other Options for Increasing ROI for Fully Funded Graduate Education

This section describes additional options for the Navy and its' policymakers to explore to increase its ROI for fully funded graduate education.

- Advocate for Naval Postgraduate School

As the primary institution for officers to earn a master's degree, it would be helpful for the Navy to do further research on whether sending more officers to NPS results in a higher ROI in comparison to CIVINS. The research's focus should be on comparing the cost and benefits of sending officers from all categories, gender, and years of service to either a CIVINS or NPS. The researcher could use the results of this thesis as a foundation to compare their results with CIVINS since this research used NPS students. If the results come out in favor of sending more officers to NPS, the Navy's ROI will naturally increase over time since the cost and benefits is more efficiently managed and calculated for NPS.

- Increase service obligation for civilian institutions

Another option to research is to consider only increasing the service obligation for CIVINS only, which may increase the Navy's ROI for fully funded graduate education. By increasing the service obligation for CIVINS, officers will be more encouraged to attend NPS where the cost for each officer is more defined and controlled by the Navy and DOD. First, the study could do a survey of officers who have attended a CIVIN for graduate education to determine if they would still have attended if the service obligation were increased. Second, the study would also include a cost and benefits analysis of sending an officer to a CIVIN in comparison to sending an officer to NPS for a graduate degree. Lastly, it is recommended that the study include a comparison of utilization with officers who have attended CIVINS versus NPS to determine if there is a difference in who utilizes their subspecialties more or less.

- Advocate for Graduate education in Promotion boards

Another recommendation to research for increasing the Navy's ROI for fully funded graduate education is whether it is more beneficial for every community to value graduate education more in promotion boards. The study's focus is on the projecting whether the Navy's ROI would naturally increase if more officers were encouraged to seek and utilize their graduate degrees to promote within the Navy and their communities. By requiring all communities to advocate for graduate education to promote, the Navy as whole might see an overall increase in the ROI for graduate education and more utilization across officer categories and communities. Overall, the emphasis on this study would be if the Navy had more control and stricter guidance on communities in terms of the utilization of graduate education and its effect on officer's careers.

- Offer fully funded graduate education to certain officer ranks

With the results of this thesis, it is recommended that the Navy looks at the graduate opportunities being offered to its officers and when these options are offered. It has been suggested that the Navy is offering graduate education to officers too early as well as too late in their careers. Both instances give opportunities for officers to separate without the Navy recouping the maximum return on investment. It is recommended for another study to do a cost and benefits analysis on if the Navy only offer fully funded graduate education to officers of certain paygrades to determine whether there is or is not an increase to the Navy's ROI. This study presents a cost-effective way for the Navy to possibly increase its ROI for sending officers to fully funded graduate education by changing programs already in place.

c. Navy Programs Conflicting with ROI

Another option for further research is to examine other Navy programs that conflict with the Navy attaining its maximum ROI on for sending officers for fully funded graduate education. In particular, the study should focus on the new blended retirement system, which allows officers to earn a reduced government pension without serving 20 years for retirement in the Navy. With this new system, officers are not obligated to stay in until 20 years to get a retirement stipend. The research's focus will

be on what affect does this program affect current and future officers' decisions to select fully funded graduate education within the Navy. Based on the results, the Navy and its policymakers can adjust their strategies with increasing the ROI based upon the effects other programs have on funded graduate programs.

APPENDIX A. STUDENT MUSTER PAGE ANNOUNCEMENT FOR RECRUITMENT OF PARTICIPANTS (DECEMBER 2016/ JANUARY 2017)

My name is LT Kim Fowler and I am requesting your participation in my thesis on the topic of Navy-funded Graduate Education. All US Navy designators and communities are encouraged to participate.

Your participation in this research is strictly voluntary, but has the capacity to have an effect on current DOD/DoN Graduate Education policy. The study consists of participating in a focus group or one-on-one interview to discuss what factors you considered in deciding to attend NPS. Your responses will be anonymous.

There will be several focus group sessions that will take place at the Naval Postgraduate School throughout the month of January 2017. Each focus group/interview will take between 30-60 minutes. Bring your lunch or snack and be part of a discussion that may help your Navy Officer community.

If you would like to participate, the first available focus groups by date and time are below:

Ingersoll Hall Room 272

Tuesday, January 17 from 1000-1400

Wednesday, January 18 from 0800-1400

Thursday, January 19 from 0800-1400

Friday, January 20 from 0800-1400

If you would like to participate, please email me at kmfowler@nps.edu with several time slot choices that work for you. I will email focus group/interview confirmation times and dates the day before your scheduled focus group/interview. If none of these dates or times work for you and you would like to participate in a focus group, please e-mail me and I will find a time that works for both of us.

If you have any questions about your participation in the study, please contact the Primary Investigator for the study, Dr. Simona Tick, 831-656-1101, sltick@nps.edu or NPS IRB Chair, Dr. Larry Shattuck, 831-656-2473, lgshattu@nps.edu.

Very Respectfully,
Kim Fowler
LT, USN
MSA Student, GSBPP

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APPENDIX B. RECRUITING EMAIL FOR PARTICIPANTS (DECEMBER 2016)

Fellow Navy Officers,

Do you have an opinion on Navy Graduate Education? If so, then you have the opportunity to have your voice heard by the Navy Education Policy Department N127.

My name is LT Kim Fowler and I am requesting your participation in a study on the topic of Navy-funded Graduate Education. All US Navy designators and communities are encouraged to participate.

Your participation in this research is strictly voluntary, but has the capacity to have an effect on current DOD/DoN Graduate Education policy. The study consists of participating in a focus group and discussing what factors led you to decide to attend NPS. All of your responses will be anonymous.

There will be several focus group sessions that will take place at the Naval Postgraduate School from Dec. 5, 2016 - Jan. 31, 2017. Each focus group will take between 30-60 minutes. Bring your lunch or snack and be part of a discussion that may help your Navy Officer community.

If you would like to participate, the following are the first available focus groups by date and time:

Ingersoll Hall - Room 282

- Thursday, December 8 from 0800-0900
- Thursday, December 8 from 1200-1300
- Thursday, December 8 from 1300-1400
- Friday, December 9 from 0900-1000
- Friday, December 9 from 1000-1100
- Friday, December 9 from 1100-1200
- Friday, December 9 from 1200-1300
- Friday, December 9 from 1300-1400

If you are willing to participate, please email me at kmfowler@nps.edu with several time slots that work for you. I will email you with a confirmation of the focus group time and date by 1700 on Wednesday December 7, 2016. If none of these dates or times work for you and you would like to participate in a focus group, please e-mail me and I will find a time that works for both of us.

If you have any questions about your participation in the study, please contact the Primary Investigator for the study, Dr. Simona Tick, 831-656-1101, sltick@nps.edu or NPS IRB Chair, Dr. Larry Shattuck, 831-656-2473, lgshattu@nps.edu.

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APPENDIX C. FOCUS GROUP/INTERVIEW QUESTIONNAIRE FOR NPS STUDENT PARTICIPANTS

Please use the alias provided to identify yourself during the discussion: _____

Background Information Questions

Gender (circle one): Male Female

Age:

Marital Status (circle one): Married Not married

Number of Dependent Children (i.e. 2):

Undergraduate Major (i.e. BA in English):

If Graduate Degree prior to NPS, what was your degree in:

Years of Service since commissioning:

Commissioning source (i.e. OCS):

Designator (i.e. 1110):

Do you plan to retire from the Navy? (circle one): Yes No Undecided

If yes, in how many years do you plan to retire after graduating NPS: (circle one): 1-3 4-10
beyond 10 years

Are you currently under any service requirement, other than graduate education related to NPS? (circle one): Yes No

If yes, list the service requirement length and reason:

Focus Group/Interview Questions for Discussion

Rank (1- Highest and 5- Lowest) each of the following factors that led you to decide to attend NPS. Briefly discuss your reason for ranking that factor. (i.e. #1- Promotion, #2-QOL, etc.)

___ Promotion (i.e. community requirement to promote to next rank) /Career Milestone (i.e. community requirement to earn a graduate degree). Reason:


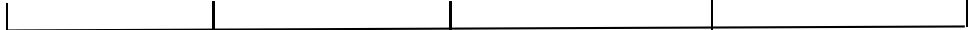


___ Quality of Life (i.e. increase in family time). Reason:

___ Benefit Post Navy Career (i.e. MA increases competitiveness in civilian labor market).
Reason:

___ Navy-funded Education (i.e. full-time student as primary duty). Reason:

___ Other- Please list any other factor that you considered important in deciding to attend NPS.
Reason:

What is the likelihood you would have made the same decision to attend NPS if the service obligation were to be increased? Please use the scale below to answer for each increment.

| No. Months | Likelihood Scale <i>Please circle a number on the scale.</i> |
|----------------------|---|
| 6 months | <div style="display: flex; justify-content: space-between; padding: 5px;"> Very Unlikely Somewhat Unlikely Neither Likely nor Unlikely Somewhat Likely Very Likely </div> <div style="text-align: center; margin-top: 10px;">  <div style="display: flex; justify-content: space-around; width: 100%;"> 1 2 3 4 5 </div> </div> <p style="margin-top: 20px;">What factors affect your decision at this point?</p> |
| 12 months | <div style="display: flex; justify-content: space-between; padding: 5px;"> Very Unlikely Somewhat Unlikely Neither Likely nor Unlikely Somewhat Likely Very Likely </div> <div style="text-align: center; margin-top: 10px;">  <div style="display: flex; justify-content: space-around; width: 100%;"> 1 2 3 4 5 </div> </div> <p style="margin-top: 20px;">What factors affect your decision at this point?</p> |
| 18 months | <div style="display: flex; justify-content: space-between; padding: 5px;"> Very Unlikely Somewhat Unlikely Neither Likely nor Unlikely Somewhat Likely Very Likely </div> <div style="text-align: center; margin-top: 10px;">  <div style="display: flex; justify-content: space-around; width: 100%;"> 1 2 3 4 5 </div> </div> <p style="margin-top: 20px;">What factors affect your decision at this point?</p> |
| 24 months | <div style="display: flex; justify-content: space-between; padding: 5px;"> Very Unlikely Somewhat Unlikely Neither Likely nor Unlikely Somewhat Likely Very Likely </div> <div style="text-align: center; margin-top: 10px;">  <div style="display: flex; justify-content: space-around; width: 100%;"> 1 2 3 4 5 </div> </div> <p style="margin-top: 20px;">What factors affect your decision at this point?</p> |

APPENDIX D. THE EFFECTS OF MINIMUM SERVICE REQUIREMENT FOCUS GROUP/INTERVIEW PROTOCOL SHEET

Welcome

Thank you for agreeing to be part of this focus group/interview. We appreciate your willingness to participate in the study.

Introductions

In order to ensure anonymity during the focus group/interview, each of you were provided with an alias that is indicated on the top of your questionnaire and name tag. The researchers will introduce themselves.

Purpose of Focus Group

To learn more about what factors Navy officers, consider when deciding to attend fully-funded graduate education, such as the Naval Postgraduate School.

IRB Consent form, Anonymity, and Questionnaire

The researchers will discuss the purpose of IRB consent form and information sheet. (takes about 5-7 minutes to complete).

Group Rules

1. *We want you to do the talking.* We would like everyone to participate. In some instances, we will go round robin to ensure we get feedback from everyone.
2. *There are no right or wrong answers.* Every person's experiences and opinions are important. Speak up whether you agree or disagree, but please be respectful of one another.
3. *What is said in this room stays here.* We want everyone to feel comfortable sharing throughout the focus group. Please keep confidential who is participating in the study and any conversation that is spoken in this room.
4. *We will be tape recording the group.* We want to capture everything you have to say. Your responses here will not be identifiable in any way in our report, and you will remain completely anonymous.
5. *Please use your alias when addressing yourself and other participants throughout the focus group.* For the purposes of this discussion, please answer in the following format: State Alias name and then answer. For example: if we ask the question, what is your NPS curriculum? You would say: This is Alpha and my NPS curriculum is Manpower Systems Analysis.

Questions

Warm Up (NPS Questions)

Thank you for taking the time to fill out the questionnaire. We're going to use that to get our discussion started. I want you to take a look at the "NPS question" section you just

filled out. We're going to go around the room, and I want you to say the top factor that led you to decide to attend NPS.

Probes: Explain why was that your top factor in attending NPS? If given the choice to go back, would you still attend NPS?

What characteristics about NPS attracted you to choose it for furthering your education? (i.e. types of degrees, going to school with other services)

Will you fill a subspecialty billet after you graduate from NPS?

Did spouses/dependents play a role in your decision to attend NPS?

Navy fully-funded Graduate Education

As we mentioned at the start of this group, today we are interested in learning more about the factors considered when deciding to attend NPS. I'd like to start the discussion by asking each of you to answer the question, do you believe graduate education at this point in your military service is career enhancing? Why or why not?

Do you believe the NPS graduate degree will help you in your career post Navy?

If not, when would you have liked to be offered the chance to attend graduate education?

If you were mentoring a junior officer in your community, what factors would you say are the most important to consider when deciding to attend graduate school in the Navy?

Are there any factors that would cause you not to attend NPS based on an extended payback?

On the flip side, state what factors would cause you to attend NPS based on an extended payback.

Probe: if they say it doesn't matter the length of the payback, then discuss WHY for a few minutes.

If participants say it varies based on length of time, then discuss WHY for a few minutes.

Opportunities and Challenges

We would like some help in brainstorming ways that the Navy can increase their return on investment (ROI) for fully-funded graduate education. What types of problems or challenges might the Navy encounter if they try to increase ROI by increasing the service obligation?

Specifically, What challenges might the Navy face in implementing an additional year or two years to the minimum service obligation for fully-funded graduate education?

Do you have any ideas on how the Navy can increase the ROI for sending officers to funded graduate education without changing the MSO?

If you were part of the Navy Education Policy department, what would you do to solve this problem?

In your opinion, how many years is too long for a required minimum service obligation for Navy fully-funded graduate education?

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